



# Patent Codlin Moth Tree Bands

## Certain Death to All Grubs That Attack Fruit Trees

It is estimated that of all Codlin Moths more than 60% are females and that a female moth lays as many as 50 eggs. On the assumption that only 50% of the eggs are fertile, a kill of 100 grubs in a tree band is immediately responsible for the death of 2,000 moths in the first year.



The above photograph (shows the actual size) inner side of an 8-inch section of "VALLO" Patent Codlin Moth Tree Bands in which 60 or more dead grubs or caterpillars can be seen. This, however, does not represent the full number of the kill as this photograph shows only one set of corrugations. The Band is actually a double trap as it not only traps the grubs in the corrugations lying immediately next to the trunk of the tree (as shown above), but a similar number are trapped and killed in the second series of small passages which are formed by the smooth outside section of the Band against the corrugated section.

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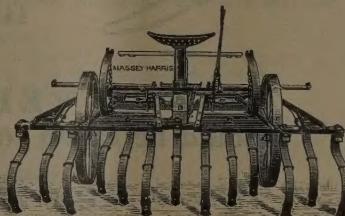
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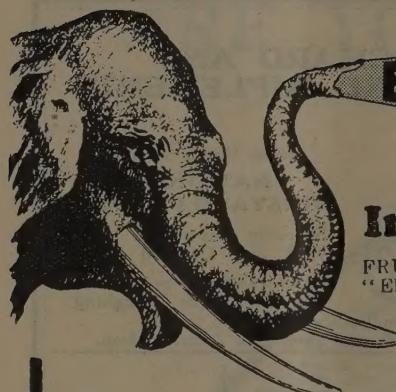
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## Editorial.

### TRADE WITH NEW ZEALAND.

THE SERIOUSNESS of the embargo in New Zealand against the importation of fruit from Australia cannot be too strongly emphasised. Australian citrus growers, in particular, who had developed a satisfactory trade with the Dominion, suddenly find that this outlet has completely closed. Citrus growers held high hopes that some way would be found out of the impasse, but these hopes have been dashed to the ground.

While it is inevitable that all countries must have quarantine restrictions—which apply to human beings, animal and plant life—it would be a thousand pities if such were used as trade barriers. Quarantine regulations, like any other man-made measures, must be administered with honesty of purpose and sound common sense. The ideal should be a healthy two-way trade between friendly peoples. Australia and New Zealand are united in ties of kinship. Goodwill can be expressed in terms of mutual contact and trade. At the present time there is certain irritation in both countries because of the lack of opportunities for free intercourse of trade. It is to be hoped that there will speedily be complete understanding, and every effort should be made to bring this about.

The news is published that the United States will admit fruit from New Zealand because of that Dominion being free of fruit fly and not receiving fruit from countries affected with fruit fly. An impartial examination of the situation yields convincing evidence of the fact that it is too far-fetched to dub Australia as infected with fruit fly because certain portions of certain States have to cope with this problem. By far the greater part of Australia's fruit areas are free of the fruit fly.

With the abundance of fruit produced in the United States, the question is being asked as to whether New Zealand is not following a will-o'-the-wisp in seeking to develop this avenue of trade to the unquestionable detriment of fruit producers in the Commonwealth.

Between Australia and New Zealand only the friendliest social and trade relations should exist. Close collaboration is needed in matters of education and foreign policy in order that these outposts of the British Empire shall maintain their prestige and leadership in the new Pacific era which is dawning.

### N.Z. EMBARGO.

**"Citrus Growers Facing Disaster," Says N.S.W.  
Fruitgrowers' Federation.**

The Prime Minister (Mr. Lyons) told a deputation of N.S.W. fruitgrowers that he held out no hope of relief now that U.S.A. had agreed to admit New Zealand fruit. The Government, he said, was fully alive to the position which, he admitted, was a very serious one.

"Nothing less than financial disaster faces citrus growers," is the statement by the N.S.W. Fruitgrowers' Federation, which body recommends action on a par with war-time measures to deal with the surplus of 300,000 cases of Oranges usually sent to New Zealand. It is suggested that the Commonwealth Government guarantee advances against overseas sales to enable the chartering of overseas vessels to lift the surplus. Leaders in the citrus industry could speedily arrange emergency methods for group packing, grading, cleaning the fruit and despatch to waterfront.

### ALL-AUSTRALIAN FRUIT SHOW.

Could be Arranged for Victoria's Centenary.

In connection with the forthcoming Centenary of the State of Victoria to be celebrated in 1934-35, the opportunity is present for a comprehensive Fruit Show to be staged. Already a Centenary Horticultural Council has been formed in Melbourne, and a huge Horticultural Exposition will be held commencing in October, 1934-35. This will doubtless provide an opportunity for a display of citrus and tropical fruits, as well as dried fruits and canned fruits. The opportunity is available now for those interested in these products to establish effective contact with the Centenary Horticultural Council, in order that the resources of the State in these lines of production shall be adequately represented.

It has been further suggested that a second Horticultural Exposition will be held in the autumn of 1935 and in this connection a comprehensive display could be made of deciduous fruits. Apples and Pears would of course figure largely; other fresh fruits could be included, together with adequate canned and dried fruit displays, as well as tropical fruits.

### PASSION FRUIT APPRECIATED IN U.S.A.

Is Export on a Commercial Scale Possible?

In a report received by the Department of Commerce from the official secretary for the Commonwealth in New York (Mr. Dow) it is stated that the United States likes our Passion Fruit, and there is a good opportunity for more business in this market. Recently the fruit was priced at one dollar (normally 4/2) a dozen in a central fruit shop in that city. The Melbourne wholesale market quotation is 7/- to 12/- a case. As a case holds approximately 36 dozen, the quotation was equivalent to from 3 dozen to 5 dozen a shilling, according to quality. Interest in this fruit is increasing in the U.S., and much publicity has been given in the press to displays made in high-class shops in New York.

\* \* \* \* \*

The Commonwealth Council for Scientific and Industrial Research intend, as soon as circumstances allow, to continue storage experiments with Passion Fruit.

Experiments were recently carried out at the Victorian Government Cool Stores, but the results were much too inconclusive for any published report. They had entirely to do with temperature of storage and with washing the fruit with various solutions and packing in paper before storage.

### STORAGE LIFE OF PEACHES DOUBLED.

Possibilities of Export.

By means of a regulated concentration of carbon dioxide in cool storage, the storage life of many varieties of Peaches has been increased from five to ten weeks.

In stating the foregoing at the recent Fruit Cool Stores' Conference, Mr. G. B. Tindale, B.Agr.Sc. (Cold Storage Research Officer, Victorian Department of Agriculture) mentioned the possibilities of developing an export trade to British markets, thus confirming the view of Dr. Smith, of the Cambridge Low Temperature Station, as reported some time ago in the "Fruit World."

## ARSENIC ON APPLES.

## Child Dies at Port Welshpool, Victoria.

A three-year-old boy, Eric William Whale, died at Port Welshpool, Victoria, on April 14, after eating an Apple. Evidence was tendered before Mr. W. L. Blanton, deputy coroner, by Dr. Arthur Nathan, C. A. Taylor (Government Analyst), Ernest Graham Bunny, and William Ramage (fruitgrowers).

A verdict was recorded that the child died from arsenic poisoning, apparently obtained from the eating of sprayed Apples.

\* \* \* \* \*

While a perusal of the evidence is not convincing as to the child's death being caused by the arsenic on the Apple consumed, the fact remains that the verdict was recorded in these terms, which is very disturbing to the public mind.

In U.S.A. all Apples and Pears which have been sprayed with arsenate of lead are washed in hydrochloric acid and rinsed with clean water to remove spray residue—whether the fruit is for export or home consumption.

## ARSENICAL SPRAYING OF FRUIT TREES.

## French Expert Says Residue Not Harmful.

**O**N THE SUBJECT of spray residue on fruit, a letter is to hand from Mr. A. G. M. Michell, of Henty House, Melbourne, enclosing the following item, translated from the news columns of "Revue Horticole," Paris, of April 16 this year.

\* \* \* \* \*

M. Pierre Viala has lodged at the Academy of Agriculture a report by E. Blanchard, Director of the Agriculture Services of Seine-et-Oise, on the use of arsenical compounds in fruit growing.

This report covers various tests of numerous sprayings practically carried out, some late in the season, on Apple and Pear trees growing in sheltered orchards. As many as eight sprayings were applied, the last being during the period of complete ripening of the fruit. He has had analyses made by the laboratories of the Institute of Agronomic Research of unwashed fruit immediately after gathering from the sprayed trees. The amounts of arsenic observed varied from 0.002 milligrammes to 4 milligrammes per kilogramme (from 1/60,000th to 1/35th of a grain per pound) of fruit.

These are quantities which are greatly exceeded in the medical administration of arsenic, in the treatment of wasting diseases or for the promotion of digestion. To obtain a poisonous dose even from unwashed and unpeeled fruit, one would have to consume impossible quantities amounting to several hundredweights daily.

**Woolly Aphis Control.**—Re your inquirer from Tasmania in last month's journal re woolly aphid, I would advise him to spray with black leaf 40 in the full strength, but when spraying, only just wet the trees with the first spray, that is, providing he has picked a nice mild day. Spray in the morning with this. Spray gently, not to blow the aphid about as is often done, and then again in the afternoon of the same day, and when the aphid is disturbed from the morning spray, he will find the second dose will have a result of about 99 per cent. kill. I have used this with almost 100 per cent. kill with the old tobacco spray, and can therefore recommend it to others.—A Victorian Grower.

## EXPORT CONTROL LEGISLATION.

## Favored by Mildura Citrus Growers.

At a recent meeting of Mildura citrus growers, Capt. Halhed presiding, it was decided on the motion of Messrs. J. Hudson and R. Rodwell, "That in view of the urgent need that exists for producers to be able to compete successfully in overseas markets, it is necessary that legislation dealing with trade and commerce should be on a Commonwealth basis, and the meeting suggests that all citrus associations in Australia should join in with other producers' associations in a deputation to the Prime Minister to ask him to arrange a referendum on an alteration of the Federal Constitution, which would provide that all legislation dealing with trade and commerce in Australia be under the control of the Commonwealth Parliament."

## PEACH YELLOWS MYSTERY SOLVED.

## Boyce Thompson Institute Tells of Discovery of Insect that Causes and Carries Disease.

The mystery of what causes the destructive yellows disease of Peaches and how it is transmitted has been solved. On March 19 the Boyce Thompson Institute for Plant Research at Yonkers, N.Y., announced that a small, wingless leaf hopper has been definitely discovered as the guilty factor, this being the reward of nearly a decade of intensive work, including experiments with some 300 kinds of insect.

The discovery was made by Dr. Louis C. Kunkel, well known to many nurserymen as, until recently, plant pathologist at the institute. He is now head of the division of plant pathology at the Rockefeller Institute of Medical Research at Princeton, N.J. He has reported that the hopper, which is less than one-eighth inch long, feeds on sap from young twigs and during the process injects a powerful virus into the tissues whence it spreads through the tree. The disease has been known for over a century as one of the most serious of Peach blights, but until now its nature and cause have been unknown, and, likewise, any effective means of control. It is widely distributed as far south as North Carolina and westward to Missouri, this area corresponding to the habitat of the insect.—"Florists' Exchange," U.S.A.

## NEW AND BETTER STRAWBERRIES.

## Appreciated Activity in N.S.W.

Mr. N. S. Shirlow, Assistant Plant Breeder of the N.S.W. Department of Agriculture, is making efforts to improve a better cropping, better flavored and disease resistant Strawberry. During the past year trials have been made by Mr. Shirlow at the Hawkesbury Agricultural College of a number of American varieties, and it was found that several were better than the best of the Australian Strawberries. Leaf spot and leaf scorch disease affected all the varieties tried out, and a campaign of cross breeding has been initiated in an attempt to evolve resistant varieties.

The variety named "Paxton" is reported to produce early crops of bright red berries. It came from British Columbia.

**N.Z. Apples for S. America.**—During May, 39,000 cases of Apples have been exported to the Argentine, in South America, from New Zealand.

## THE PASSING OF THE PIONEERS.

Mr. Charles French, Senr.

In the passing of Mr. Chas. French, Senr., Australia loses a pioneer horticulturist and a good citizen. Mr. French died at his home at Malvern, Victoria, on May 21, at the ripe age of 93 years. During his long and active career, Mr. French rendered service of the very highest value to this State and to Australia. At the age of ten years he arrived in Melbourne from England with his parents. A keen plantsman, he was soon engaged in nursery work, and subsequently joined the Botanic Gardens staff, under Baron Von Mueller. Here Mr. French spent 20 years in charge of the propagating houses and glasshouses. Later he was appointed Government entomologist, being the first to hold that position. His handbook "Destructive Insects of Victoria," is still the standard work on this subject; he laid the foundation for research work into pest control methods. Always a lover of Nature, he was one of the founders of the Field Naturalists' Club of Victoria.

On retiring from the Government service, he was succeeded by his son, Charles French, Jr., as Entomologist, which position he held until appointed Government Biologist. Another son, Mr. George French, florist, of Melbourne, died several years ago. There are two daughters, Mrs. T. Ewart, of W. Aust., and Mrs. J. Turner, of N.S.W. Mrs. French survives her husband.

There was a representative gathering at the funeral to pay a last tribute to the memory of this stout-hearted pioneer. The remains were fittingly laid to rest in the Cheltenham cemetery—ground over which, as a young man, the late Mr. French many times tramped among the wildflowers and in search of entomological specimens.

## PERSONAL.

Mr. A. E. Herring, representing the Batlow (N.S.W.) cool stores, was an appreciated delegate at the Fruit-growers' Cool Stores' Conference at Mornington, Vic.

Mr. W. Le Gay Brereton, Chief Fruit Instructor, N.S.W. Department of Agriculture, who is conducting investigations into Cherry pollination, visited Young during May.

Mr. H. G. Purcell, Fruit Inspector, Department of Agriculture, who was stationed at Elphinstone to inspect fruit during the recent export season, speaks in terms of high appreciation of the quality of fruit in that district. Mr. Purcell has now returned to his duties in the inspection of fruit at the Victoria Markets, Melbourne.

Mr. A. Rose, Adelaide Manager for Messrs. Silk Bros. (of Melbourne and Sydney), addressed the Campbelltown branch of the South Australian Fruitgrowers and Market Gardeners' Association early in May, urging carefulness in grading and packing of Celery for interstate markets.

Mr. J. M. Balfour, Chairman of the Dried Fruits Board, Mr. E. Meeking, a member of the Board, and Mr. Baker, Secretary visited Mildura during mid-May on matters affecting the operations of the Dried Fruits Board.

Mr. J. L. Provan, Horticultural Research Officer, Department of Agriculture, recently visited Mildura and inspected trees which have been reworked. It was noticed that the buds and grafts had taken nicely.

**A Big Apple.**—In the Murrumbidgee Irrigation Area this season, Mr. Alan Oag produced a perfect Rome Beauty Apple that weighed 1½ lbs.

Is this the largest Apple grown this season? The Editor would be pleased to hear from readers.

## THRIPS INVESTIGATION.

## The Search for a Suitable Repellant.

PRELIMINARY TESTS were carried out with certain materials to combat thrips by Mr. J. W. Evans, M.A., in 1932, at the Waite Agricultural Research Institute, Adelaide. The cold weather in October hampered the work and curtailed the programme of experiments. Tests were made with lime-sulphur and lime-sulphur and resin. The dusts were nicotine, sulphur and pyrethrum. Results showed that sprays containing strong essential oils are of no use, their effect being too short-lived. Lime-sulphur proved that it has no deterrent value, while lime-sulphur and resin are too short-lived to be of any real value. Two brands of nicotine dusts were used to compare their efficiency with pyrethrum. It was found nicotine killed thrips quicker than pyrethrum, but the effect was not so lasting. Sulphur dust was also tried out and has little repellent value. Two brands of pyrethrum were tested, a proprietary preparation and an ordinary commercial pyrethrum powder. The latter differed from the former in not having a carrier incorporated with it. On account of its prohibitive cost, tests were made with pyrethrum and sulphur. With all tests it was found that in the proportions of one part of pyrethrum to ten of sulphur almost complete control of thrips was obtained over a period of 48 hours from the time of application. At the high cost of pyrethrum in Australia, unless produced locally, it will not be economically possible to use this unless with a carrier.

The experiments have been carried out for the purpose of determining the nature of materials suitable for thrips control rather than a search for any specific substance.

In the Journal of the Council for Scientific and Industrial Research for May, 1933, full details are given of Mr. Evans' investigations to date.

## VINE DISEASE WARNING.

A WARNING against the transfer of vines or cuttings into certain areas is issued by the Superintendent of Horticulture (Mr. J. M. Ward). Phylloxera is the danger, and the Vegetation Diseases Act contains drastic provisions.

Any person who removes from a vine-disease district any vine or part of a vine, or plants or transplants within or brings into any part of Victoria any diseased vine or part of a vine or any vine or part thereof which has been removed from a vine-disease district or from any place outside Victoria infected or reasonably believed to be infected with vine disease, is liable to a penalty of £100. There are two such vine-disease districts—Geelong and North Central. The Geelong vine-disease district comprises part of the County of Grant within an approximate radius of 15 miles from the town of Geelong. The North Central vine-disease district comprises the whole of the Counties of Bendigo and Rodney and parts of several other Counties, an area extending north and south from Echuca to Seymour, and east and west from Tallangatta to the Avoca River.

Before vines or vine cuttings may be introduced into Mildura, Swan Hill, Lilydale, Great Western, Cresco, Koondrook, and part of Kerang, a permit from the Department of Agriculture is necessary. No tree, plant or vegetable is allowed into Mildura, Swan Hill and Kerang shires, unless certain conditions have been complied with.

It is hoped that nurserymen and others will carefully note this warning and avoid breaches of the law which might otherwise arise through oversight.

# The Commercial Processing of Apple Juice.

## An Important Outlet for the Fruit Industry.

### The Methods Described.

THE ARTICLE dealing with the commercial processing of Apple juice published in the April "Fruit World," created considerable attention, many requests being received for a copy of the U.S.A. bulletin, describing the process. With only one copy of the bulletin on hand, it was not possible to make this available as requested.

However, we publish hereunder further extracts, which, we trust, will be helpful.

\* \* \* \* \*

**UNFERMENTED APPLE JUICE** has long been known in the U.S.A., and enjoys a small sale during autumn.

It is doubtful if a larger demand for it can be created unless the usual muddy-looking, and gummy tasting juice, is rendered more pleasing to the eye and palate. It was therefore sought to produce a

sparkling clear juice,

devoid of sediment, having all its natural fruity flavor, and to carbonate this juice so that it appeals to the palate after the manner of popular beverages, such as ginger ale, etc.

In locating a plant, consideration must be given to the distribution of the finished product and the population to be served with the minimum of effort in advertising and marketing.

The suspended material found in freshly pressed Apple juice was subjected to chemical analysis. It was not of constant composition for the different varieties examined.

The problem of producing a sparkling clear juice obviously centred around a knowledge of the materials present in the expressed juice, that caused the juice to be cloudy and which had to be removed during processing.

Centrifugal force was applied to the raw juice of several varieties, the correct percentages being obtained of ash, fibre, protein, tectose, pectic material, tannin, ether extract and sugars.

### The Flash-heating Process.

To overcome difficulties of filtration with certain kinds of heated Apple juice, a greater amount of filter aid was added in building the press-cake.

Rapid heating of the juice to 180 deg. F., and holding for 20 seconds, is sufficient in most cases to ensure clear filtration.

There are several batch processes for clearing Apple juice, namely, the gelatin-tannin, the clarase and pectinal enzymic methods. All of these require the treated Apple juice to stand a day or longer before clearing is effected and the juice passed on to the filter.

Freshly pressed Apple juice is passed at a constant rate, regulated by a float feed, through a tubular flash heater so connected that the lower four tubes are heated by steam and hot water at 180 deg. F., and the upper four tubes are cooled by cold water. Under a hydrostatic head of about one foot, the juice requires about 20 seconds to pass out of a given tube into the next, so that the total heating period in the heater is about 80 seconds, and the time about 20 seconds, during which the juice is at its highest temperature. The juice is then cooled to room temperature or below by passing through the cooling coils. In this manner the juice is heated sufficiently to coagulate the colloids, and at the same

time no aroma of flavoring materials are volatilised, as the juice is cooled before it leaves the heater.

With the small sized heater at our disposal (state the investigators), the output has been about a gallon per minute. Heaters of similar design of 1,000 to 2,000 gallons capacity per hour are on the market, and are familiar equipment to the dairy industry.

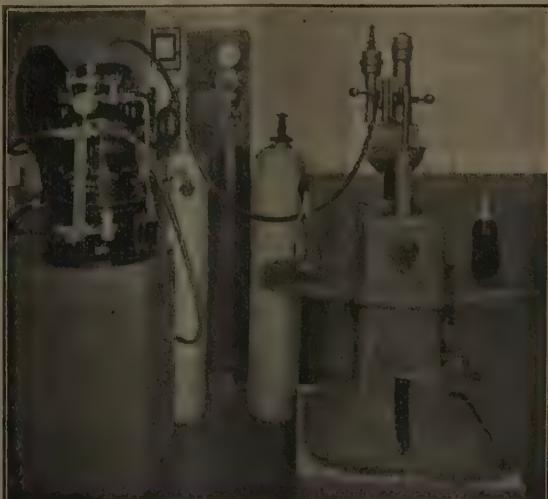
From the flash heater the juice is delivered into tanks, where it is well mixed with filter-aid by a motor-power stirrer and pumped into an assembled framed filter press for filtration.

A brilliant clear condition can be obtained by a final filtration through asbestos. If the last filtration be made through a Seitz germ proofing filter, the filtrate is sterile and may be bottled for trade. In case the Seitz germ proofing filter is not used, the filtered juice, whether polished up or not by further filtration through asbestos, must be pasteurised at 170 deg. F. for 20 minutes in the sealed containers in which the juice is to be marketed if it is to be kept unfermented. The preservation of Apple juice with chemicals such as sodium benzoate, is not recommended.

The gelatin-tannin process has been used for many years in the "fining" of wines. This process can be used in the clarifying of Apple juice under technical conditions. Apple juice may also be clarified with clarase, a fine powder manufactured at Clifton, N.J., or pectinol.

### Carbonated Apple Juice.

The carbonation of sparkling clear Apple juice is a very easy matter that involves few difficulties. The filtered juice is pumped into a carbonator and impregnated with carbon dioxide gas at whatever carbonation pressure is desired. For the sweeter and less astringent juices a carbonation of 2.5-3.0 volumes is required, and for the more astringent juices, such as Roxbury, a carbonation of 2.0-2.5 volumes is sufficient. Commercial



Carbonator and Bottling Machine.

Apple juice would doubtless be made from blends of several varieties and not from single varieties as in the recent tests.

#### Summary of Comparisons of Carbonated Apple Juice.

	Northern Spy.	Rome Beauty.	Roxbury.
Number persons reporting . . . . .	87	100	119
Carbonated juice equal to or better than ginger ale, % . . . . .	86.2	80	85.7
Prefer carbonated over uncarbonated, % . . . . .	93.0	84	75.6
Prefer carbonation of 2 volumes over 3 volumes, % . . . . .	52.9	54	73.2
Flavor satisfactory, % . . . . .	75.8	86	96.6
Aroma satisfactory, % . . . . .	78.2	88	98.3
Uncarbonated juice, too sweet, % . . . . .	71.3	54	37.0

Blends of different fruits are possible. The blending of Quince juice is favored. It is recommended that in the case of blends the various varieties of fruit be either mixed and pressed at the same time or that the respective juices be mixed together before the processing of the juice is begun.

A summary of the matter is that the production of carbonated Apple juice is an important outlet of the fruit juice industry. It is evident that a carbonated Apple juice may be produced that is highly satisfactory, and for which a public demand may be expected.

Extracts from "Technical Bulletin No. 202," New York State Experiment Station, Geneva, N.Y., U.S.A.

#### GREEN PEACH APHIS.

##### Control Measures for this Bad Pest.

One of the worst pests that the commercial Peach grower has to put up with is the green Peach aphid. Severe infestations may not occur every year, but in seasons of good crops, the insect causes considerable losses. During the dormant period, control measures are carried on and the time is soon coming to consider the question of laying in a stock of spray materials.

Mr. McCarthy, Senior Assistant Entomologist, of N.S.W., stated recently that during spring and early summer the trees were injured. The leaves and blossoms became distorted and shrivelled, and a large proportion of the blossoms did not set, but where the fruit did set, its size and quality might be affected. He recommended the use of a tar distillate spray or a nicotine sulphate and soap spray. Tar distillate spray should be applied to the trees when they were completely dormant, and after the last of the over-wintering eggs had been laid. The period when the spray should be applied varied with the district, but in the Irrigation Area it was usually about the middle of June until towards the end of July. Tar distillate sprays must not be applied when the buds were commencing to burst. A dilution of 1 to 40 was capable of giving complete control for most brands of tar distillate on the market.

Nicotine sulphate and soap had no effect on the eggs, and should be applied after they had hatched and before the bursting of the buds. The spray should be mixed at the rate of one part of nicotine sulphate to 600 parts of water, plus 1 lb. of soft soap to 25 gallons.

It is necessary with any spray for the control of aphid, to spray thoroughly, paying particular attention to the laterals. One application only of tar distillate or nicotine sulphur spray was necessary provided it was applied thoroughly with a high pressure spray and at the right time.

#### THE POSTAL SERVICE.

##### Cash on Delivery Post.

The cash-on-delivery post is a system under which the Department upon delivery of a parcel on which the prescribed fee has been paid collects from the addressee a sum of money fixed by the sender and pays to the sender the amount collected. The system is designed to meet the requirements of persons who wish to pay on delivery for goods sent to them, and also to meet the requirements of traders and others who do not wish their goods to be delivered except on payment. The system is open to parcels addressed to and posted at certain post offices in the Commonwealth, which are indicated as cash-on-delivery offices in the list of post offices published in the Post Office Guide. A cash-on-delivery parcel addressed to a place in the Commonwealth where there is no cash-on-delivery office is transmitted to the cash-on-delivery office nearest to such place, and upon the sum specified by the sender being remitted to such office the parcel is forwarded as an ordinary parcel to its destination. Any article eligible for transmission by post and the contents of which are sent in execution of a bona fide order, is transmitted as a cash-on-delivery parcel upon (a) the article being handed in at a cash-on-delivery office; (b) the prescribed commission being paid in postage stamps, in addition to stamps in prepayment of postage at the rate prescribed for parcels, or, where the article is a letter, at the rate prescribed for parcels or letters whichever is the greater, and (c) the sender filling in a cash-on-delivery label and registration form and signing a certificate attached to such form that the contents of the article are sent in execution of a bona fide order, the label to be affixed to the article by the sender and the form handed in with the article.

The commission (which includes a registration fee of 3d.) payable in respect of a cash-on-delivery parcel posted in the Commonwealth is in accordance with the following scale:—

Amount specified by sender to be collected	Commission.
on delivery of cash on delivery parcel.	Commission.
Not exceeding 10/- . . . . .	9d.
Over 10/-, but not exceeding £1 . . . . .	1/-
Over £1, but not exceeding £1/10/- . . . . .	1/3
Over £1/10/- but not exceeding £2 . . . . .	1/6
Each additional £1 or fraction thereof . . .	3d. additional

It is important to note that it is stipulated in the regulations that the payment of the prescribed commission (which includes a registration fee of 3d.) shall provide for compensation up to the value of the contents, but not exceeding £2, in the event of the entire cash-on-delivery article being lost whilst in transmission through the post.

The system is of great utility to mail order establishments and to persons who desire to obtain goods by post and pay for them on arrival.

#### ERADICATION OF BLACKBERRY.

If precautionary measures are adopted, Blackberries can be destroyed as soon as they appear and little difficulty is experienced in keeping them under control. Sodium chlorate at the strength of 1½ lb. to 1 gallon of water has proved a most effective spray. The best time is to apply it in the early summer when the vines are making active growth and showing numerous leaves. At this stage the foliage absorbs the solution quickly and the plant dies rapidly.

He who works for the good of the world holds the key to happiness.

## SAYING IT IN VERSE.

## Inspection of Fruit.

News Item—"Many orchardists bitterly resent the rigid inspection of fruit for export."—"The Sun."

Some growers complain:  
"It's a lot of d—— rot  
When Inspectors won't pass  
Codlin moth or black spot.

The fruit must be perfect,  
The cases pure white,  
They're packed far too slack  
Or else packed too tight.

The Department decrees  
That one atom of lead  
Means repacking the whole  
Blooming lot in the shed.

If wishes came true  
Mr. Ward and his staff  
Would sizzle in hell  
And be then cut in half.

The growers who growl  
Will know better some day  
When taught by experience  
What doesn't pay.

Give Wadeson a "go"  
By playing the game,  
And you'll find Mr. Orchardist,  
He'll do the same.

But you'll find that his memory's  
As long as the years  
When he finds in one case  
Three varieties of Pears.

—“Black Cat.”

(Mr. R. T. Wadeson, Fruit Inspector for the Peninsula district. Some time ago he found three varieties of Pears in the one case.)—"The Peninsula Post."

## TASMANIA.

Up to May 13, Tasmania had exported 2,220,833 cases of Apples and 174,367 cases Pears. The quality this year has been excellent. While some growers have complained of the severity of the inspection, there is a general feeling that the heavy rejections are justified in the light of an all-round improvement in the export pack. On the whole, the export season is an early one. In order to fill space, Sturmers were picked during the third and fourth week of March. This is several weeks earlier than usual.

Growers are appreciative of the fact that the Department has seven packing instructors, who have rendered good service in their visits to the several fruitgrowing areas.

## PERSONAL.

Mr. A. A. Hammond, formerly Chief Orchard Supervisor for the Victorian Department of Agriculture, has joined the staff of Orchard Sprays Pty. Ltd., of Richmond, Victoria. He was recently presented by the Council of State Professional Officers, with an inscribed black-wood writing table as a tribute of esteem. Mr. Hammond has lectured and demonstrated on fruit tree spraying to orchardists in many parts of the State. He invariably drew large audiences.

Mr. J. Barker (Barker, Green and Parker, fruit exporters, Melbourne), sailed for England on May 27, and will be absent from Australia for about four months.

## NEW AUSTRALIAN FAIRY TALES.

## A Bright Book for Every Home.

“New Australian Fairy Tales” is an excellent book for children, containing interesting stories featuring Australian native birds and animals. Colored illustrations are included throughout, the stories including Koala and the Mayor of Mt. Dandenong, Bun Yip and the Haunted Hills, The Fox and Jenny Wren’s Eggs, Kanga and Kooka, Freddie Wander Lost in the Bush, The Curious Fox, and the Farm Horses’ Club. This book is bound in stiff covers and may be obtained at 1/- per copy (1/2 posted) from the Horticultural Press Pty. Ltd., Box 1944, G.P.O., Melbourne.



Interior of new Cool Stores and Packing Room at Shepparton (Vic.), during packing of 45,000 cases Pears and Plums for export to London.

(B. Krone, photo.)—

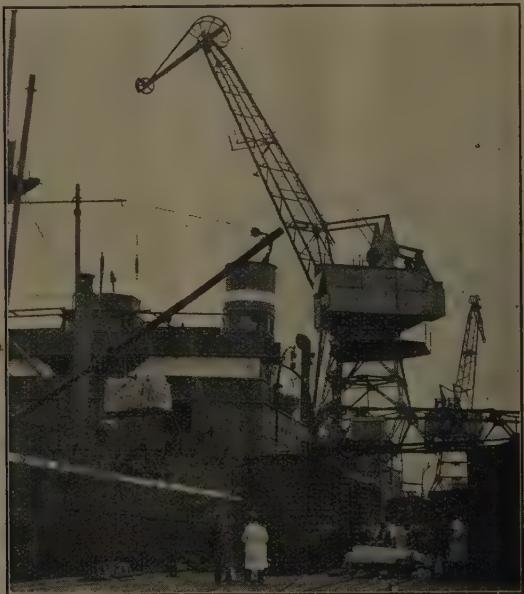
## RECORD SHIPMENT OF VICTORIAN FRUIT.

Doric Star Loads 200,000 Cases of Apples and Pears.

**G**REAT INTEREST was taken in the loading of the Doric Star with fruit at Melbourne. This was one of the specially chartered ships to lift the heavy crop of Victorian export fruit. The Doric Star belongs to Lord Vestey's Blue Star Line, and is specially constructed for the conveyance of refrigerated cargo. The vessel has been engaged in the regular shipments of fruit from the Pacific Coast, via Panama, to British ports. A record quantity of 200,000 cases of Apples and Pears (principally Apples) was loaded during May. Into the largest of the holds were stowed 38,000 cases of Apples, the smaller holds containing around 11,000 and 9,000 cases.

The ship is fitted with two systems of refrigeration—brine pipes and air circulation. It has been noted that the fruit carries equally well under both systems. Through the courtesy of Captain Capon, a representative of the "Fruit World," accompanied by the chief engineer, Mr. Ray, inspected the loading of the holds. The Apples were packed in the standard Canadian cases, and the carefulness of the handling was noted. From the rail trucks to the wharf the cases were unloaded by means of roller conveyors ready for placing into the ship's trays. These trays were lifted and lowered into the ship's hold. Here again, conveyors were used for the prompt and careful handling of the cases. It was noted that the cleats provided for air circulation, there also being Dunnage between the stacks. The United Stevedoring Co.'s stevedores handled the fruit very carefully.

In conversation with Mr. Ray, it was mentioned that Oranges were successfully carried from the Pacific Coast to British ports, the journey taking approximately five weeks. The Oranges carried equally well under the two



Loading Apples on "Doric Star," at Melbourne. Note twin lifts of 112 cases from trucks to ship's hold.

—B. Krone, photo.

systems of refrigeration. A feature was made, however, of having the Oranges pre-cooled prior to shipment.

Messrs. McIlwraith, McEacharn Ltd., Melbourne, acted as agents for the vessel.

## Western Australia.

Export of 600,000 Cases.

This season's fruit export from W.A. to April 28 totalled 494,778 cases, made up as under:—Apples, 412,897; Pears, 41,401; Grapes, 39,979; Peaches, 99; Plums, 315; Nectarines, 10; Quinces, 76. Shipping space has been booked for about 80,000 cases in May and June, so that total exports for the season should approximate 600,000 cases. Last year 670,867 cases of Apples, 47,711 cases of Pears, and 32,374 cases of Grapes were exported. Mr. G. W. Wickens, Commonwealth Supervising Officer, recently stated that as last season's export was a record, this season's total was especially pleasing, as heavy seasons had usually been followed by light seasons.

The following remarks have been received from Mr. W. F. Ribe, of Mount Helena, Western Australia, regarding the present season:

The season began with such a heavy setting of stone fruit that although constant thinning took place incessantly every bloom set that wherever a large orchard prevailed it was impossible to obtain anything like a very good sample. Then the Rutherglen bug took its toll; every orchard suffered, some more than others. In some places, all the orchard suffered, and in others, only part. All means were used in combating the pest, from smoke to the use of a beehive smoker and black leaf 40, and, although prices suffered in consequence, the market was better sustained than most people would think, although in some cases it fell as much as 6d. per case. The minimum was about 2/6 per case.

Considering this to be the off season, a fair setting of Apples, and, generally, a good setting of Pears took place. The buyers could only give 5/- for Jonathans, 7/- for Cleos., 6/- for other varieties, except, perhaps, Granny Smiths. The prices realised so far in Europe will just about return this amount. All the Pears are sent on consignment and according to reports, should return about 4/- per half dump, which is the principal container used. Apples have been inclined to be on the large side and Pears on the small side.

This season, owing to Rutherglen bug, no early stone fruit was exported, but some late varieties of Plums have been sent to the Near East with good results. In the setting of even the heaviest crop of Plums some trees bore heavily, while others seemed to be somewhat shy, and this applies to all fruit. It is generally conceded that the Nectarine and the Peach grows well on the same soil, but not so here, the former needing a mixture of somewhat stiff clay and gravel mixed, and the citrus crop suffered owing to dry weather generally.

**Perth** (20/5/33).—Apples: Jons., dumps, best 8/- to 11/- (others from 5/-); Dunns, 3/6 to 7/-; R. Beauty, 4/- to 6/-; Yates, 6/- to 9/- (others from 5/-); G. Smith, 6/- to 9/-; Cleo., 4/- to 7/6; Doherty, 4/6 to 7/6; Del., 5/- to 8/6 (others from 4/-). Citrus: Navels, flats, 4/- to 6/- (others from 2/-); dumps, 5/6 to 9/- (special to 11/-); Lemons, 3/- to 7/-; Pears, flats, 2/- to 4/6; dumps, 3/6 to 7/6; Grapes, open, colored, 5/6 to 9/- (special to 11/9); dumps, 4/- to 8/- (special to 9/9, inferior from 1/6).

# Citrus News and Notes.

## CITRUS BUD SELECTION.

(By R. J. Benton, N.S.W. Dept. of Agriculture.)

(Continued from May "Fruit World.")

Most of you will be familiar, probably, with the bud selection investigational work by Shamel, many observations from which have been confirmed by results here.

In order that observations and records on a larger scale might be available for departmental or commercial use, the services of our fruit inspectors have been enlisted in citrus-growing areas.

Such assistance is the recording of several plots of trees in their respective localities which are regarded as being the most suitable and comprise records of Washington Navel, Valencias and Emperor Mandarins.

Inspectors' time is naturally limited, preventing large areas being recorded in a more accurate manner than by estimates in the case of yields.

A close watch is made for limb variations or sporting tendencies, however, which aspect is regarded as being of the most importance in making the records.

The records are made over four years' observations.

Over 2,000 trees have been thus recorded already, whilst approximately an equal number have been observed for shorter periods. Buds from certain of the trees have been obtained for propagation at Narara Nursery.

Though the records are primarily of value for bud selection purposes, advantage has been taken of some of the records to prepare the record displayed, in which the trees have been arranged in their order according to the estimated percentage of crop averaged annually over four periods.

Admittedly estimates probably with each inspector, will be on somewhat a different standard, but it is believed that the standard adopted by each would be reasonably constant.

Part of three inspectors' records are shown in the analysis, each plot of which indicate possibilities of greater economy in production costs.

Whatever may be the reason for certain trees being a burden, whilst in other cases individual trees are much more productive, the tree record for such a period indicates the necessity for improvement in some direction. Such reduction of productivity may be due to inherent, environmental or cultural factors.

Before concluding, it is desired to stress that in citrus selection work, seasonal and soil conditions cause minor variations which are sometimes regarded as being inherent defects.

Due apparently to favorable growing conditions in some seasons, Valencias, as an instance, are mostly roundish—under less favorable conditions, probably they may tend to be slightly flatish.

Navel under the same respective conditions may be more prone to a little flatness at the stem end or somewhat elongated by a more conical shaped navel end, at other times more roundish. The internal qualities, however remain constant and may only be altered by other factors than of inherent origin.

In the first year's production of fruit from Washington Navel buds from seven trees selected as being the best in as many different localities, and all top worked on to two trees at the Hawkesbury College, no discernible difference could be noted, though in the parent tree's fruit slight differences in appearance and flavor could be detected.

Discretion is therefore necessary in citrus bud selec-

tion in making deductions for variations in soil, environment and seasonal conditions.

The incidence of noting variations which are either partially or totally devoid of juice have been observed on many occasions in trees of the White Siletta variety and occasionally in a tree of Parramatta type. Such dry fruits have been borne not only as occasional specimens, but as limb variations, and in one case the whole tree was affected.

## CITRUS CROPS IN N.S.W.

**I**N a report received from the Department of Agriculture, N.S.W., early in May, it is stated:—

**Coastal Districts.**—Heavy rains early in April proved most beneficial, Thompsons and Washington Navel developing well. Valencias sizing well: commons poor to good. Silettas coloring nicely. Good crops are in sight in the Hunter district, where trees were not affected by the severe frosts of last season. Imperial Mandarins being marketed. Emperors developing satisfactorily; crops good.

Main crop Lemons are scarce in some districts, whilst in others some fair quantities of fruit are showing. In a number of centres, there is plenty of bloom apparent, but it is doubtful if any quantity of fruit will set.

**Irrigation Areas.**—Navel coloring, but maturity a fortnight later than last season. At Griffith the fruit inclines to large sizes: medium yields indicated. Valencias generally light. Lemons light to medium. At Curlwaa, Navel coloring: crop good, but the fruit generally will be too large. Valencia and Grapefruit trees carrying good crops. Grapefruit quality excellent. Lemons show fairly good main crop.

**Gosford.**—Navel crop patchy, generally light on old trees, but many young trees are carrying good crops. Fruit coloring and sizing well. Valencia crop prospects fair. Fair crops of common Oranges are in sight, and it is expected that the best quality fruit will be exported to England. Main crop Lemon yields are generally light. A few lots of Grapefruit have been marketed.

**Wyong.**—Fair crops of medium-size Navel coloring. Valencias, medium crop, fruit large. Good crops of White Silettas in sight. Joppas and others medium.

**Windsor.**—Navel generally large in size. Fair to good crops of Valencias showing in more favored situations. Good crops of Silettas of large size coloring. Joppas generally light. Imperial Mandarins being marketed. Emperors filling satisfactorily, and prospects indicate heavy yields. It is likely that an intermediate crop of Lemons will set.

**Hills District.**—Navel light to medium. Valencias and common Oranges generally developing satisfactorily. Mandarin crops have good yield prospects. Main crop Lemons sizing well: prospects light to medium.

**Kurrajong.**—Navel from the Colo portion of the district being marketed. General maturing later this season. Small consignments of main crop Valencias continue to come forward from the Bilpin district, and second crop fruit is being marketed. The Siletta crop will not be ready for some weeks. Some heavy crops of Mandarins are in sight, but backward in size.

**Moorland.**—Navel coloring well; Silettas are well col-

ored, but the Mandarin crop is backward, both in color and size. Indications point to a heavy flowering of Lemons.

Bulga.—Owing to dry conditions, there is practically no Navel crop. Valencias and commons light: Mandarins fair.

Parramatta-Penrith.—In the Penrith district, W.N. and Thompsons developing well and coloring. Some consignments marketed. Valencias satisfactory. At Seven Hills the crop has shown considerable improvement. Imperial Mandarins being marketed. Other varieties well forward and some heavy yields anticipated. The low price for Lemons is restricting marketing.

Narromine.—Navels have developed well. A full average yield of medium-sized fruit is in sight. Only a light to medium crop of Valencias. Some good quality Joppas are showing. A light Lemon crop is expected. A medium crop of Grapefruit is showing on trees.

Forbes.—Golden Buckeye Navels being harvested. Other Navels are coloring well. Both Valencias and Common Oranges have improved wonderfully since the rain. White Siletas have colored. Mandarins patchy. Lemons light.

Dubbo.—Fair crops of Navels, but Valencias are light. Commons light. Mandarins fair. Practically no Lemons in sight.

#### CITRUS CROPS IN VICTORIA.

The latest report issued by the Victorian Department of Agriculture states that in the early citrus districts Oranges are being marketed, and the fruit appears to be of fine quality. Much of it is large. Some growers are picking early Navels. Before harvesting growers are advised to test the fruit for maturity. The maturity standard for the approaching season will be not more than 26 c.c.s. of soda solution for neutralisation of the acidity in 10 c.c.s. of juice. Growers should seek the assistance of district orchard supervisors and of packing shed authorities in determining the maturity of their fruit.

The crop for the Mildura district, including Curlwaa, it is estimated, will comprise 275,000 cases of Oranges, 12,000 cases of Lemons, 15,000 cases of Mandarins, and 10,000 cases of Grapefruit. These estimates represent a decrease of about 10,000 cases of Oranges, but for Lemons and Grapefruit they show an increase of about 20 per cent. Mandarins have decreased by 10,000 cases.

#### CITRUS SEASON OPENS.

All Fruit is Being Tested for Acidity.

Immature Fruit Will be Rejected.

**T**HE CITRUS FRUIT SEASON has now opened, and consignments of Oranges are arriving in Melbourne from Queensland, New South Wales and South Australia, as well as from the early districts in Victoria. All consignments are tested for acidity content by the officers attached to the Fruit Inspection Branch of the Department of Agriculture. Mr. J. M. Ward (Superintendent of Horticulture) recently stated that it is intended to rigidly enforce the regulations, and that the sale of fruit which required more than 26 c.c.s. to neutralise the acid in the mixed juices of samples taken from consignments would not be permitted.

Growers and proprietors of packing sheds are advised not to forward immature Oranges, as by doing so they incur the risk of paying freight and other charges on

fruit which will not be accepted by the Department. Already the sale of several hundreds of cases has been stopped this season owing to immaturity.

#### CITRUS ROOT BORER BEETLES.

##### Successful Control Measures in N.S.W.

In an orchard near Windsor, N.S.W., last winter, spring and early summer, a count was made of the citrus root borer beetles (*Leptops squalidus*) which numbered about 8,000. The orchard had been almost ruined by the grubs of the beetle about five years ago, but is now in a flourishing condition, and bore a record crop of fruit this season. Through unremitting attention on the part of the owners by following out the bandaging system with a strong adhesive mixture and regularly collecting the beetles daily, they have practically got the pest under control and this accounts for the comparatively low count obtained last season. The owners fully realise the necessity still for constant vigilance and are not relaxing in their efforts to combat the pest.

#### S. AFRICAN CITRUS EXPORT.

2,000,000 Boxes this Season.

About 2,000,000 boxes of citrus fruits are expected to be available for export overseas from the Union of South Africa in 1933, according to Agricultural Attaché C. C. Taylor, at Pretoria, in a report to the U.S. Dept. of Agriculture. This is about the same quantity as was available last year. Early fruit shipments include a large volume of Navels, and will probably exceed those of last year, whereas the shipments of later fruit, including Valencias from drought affected areas, will probably be less than last year.

Shipments of Grape-fruit are likely to be somewhat less than 200,000 boxes.

#### POOL PACKING FOR CITRUS.

Mildura, 15/5/33.—Captain Halhed, a member of the V.C.C.A. Board of Directors at a recent meeting at Mildura, said he favored a pool pack for Oranges under a district brand. This would give a continuity of supply to their very high quality fruit. It would be necessary to give the packing houses full control of the growers' fruit.

#### NEW ZEALAND EMBARGO.

An important meeting of citrus growers was held at Mildura during May to discuss the embargo against Australian fruit entering New Zealand. Captain Halhed presided. Mr. Winterbottom said that while the embargo was against all fruit, it had to be realised that citrus fruit comprised 95 per cent. of the Australian fruit entering New Zealand. That market had taken from 250,000 to 300,000 cases per annum of Australian citrus which now enjoyed an established reputation in the Dominion. Apparently, New Zealand disagreed with Australia's tariff policy. Australian producers of potatoes, onions, butter, oats and barley were protected, but the citrus industry was sacrificed. A resolution, which was supported by Messrs. R. Rodwell, A. E. Cameron, C. H. Cameron, and L. Mansell, was carried, urging the Commonwealth Government to request New Zealand to remove the embargo on Oranges even temporarily for six months, beginning in June.

# New South Wales.

## HORTICULTURAL RESEARCH IN N.S.W.

**Green Peach Aphis—Red Scale—Codlin Moth—Pruning—Pollination—Re-working.**

IT IS PLEASING to note that once more the Conferences of Agricultural Officers on the Murrumbidgee irrigation areas have been resumed.

At Leeton during May, officers of the Department of Agriculture, Commonwealth Research Station and the Water Conservation and Irrigation Commission met and a number of matters of interest to irrigation area settlers were debated. Some of the principal items were:—

**Control of Green Peach Aphis.**—It was suggested that complete destruction of all weed growth in orchards right throughout the district might prevent the aphis from maturing and depositing their eggs on the trees as a nucleus of the spring infestation. Mr. Hely said that no good would result even if all orchards were 100 per cent. clean, as there was so much weed growth outside the orchard boundaries. Mr. C. G. Savage, Director of Fruit Culture, stressed the need of organic matter in orchard soils of growing green manure and de-watering crops in the autumn and winter. He considered the proposal impracticable and pointed out that control was dealt with by the Agricultural Department's Pests Leaflet, No. 16.

**Control of Red Scale.**—On the subject of the relative efficiency of spraying or fumigation for the control of red scale, the opinion was expressed that provided the spray was applied in sufficient quantities and evenly over the treated trees, it was as satisfactory as fumigation and less costly. Mr. Savage stated that in America control was secured by a winter spraying with H.C.N. for resistant scale. It was pointed out the summer treatment was necessary and Mr. Hely considered from early January to March the best period for this work.

**Control of Codlin Moth.**—The efficiency of bandages was discussed. Attention was drawn to bandages on the market impregnated with a substance said to be deadly to the grub. Mr. Savage stated that similar bandages were claimed in the United States to be effective, but he did not know if the local product was satisfactory. He stated that bandages had been omitted from the regulations owing to lack of staff to enforce removal and killing of grubs at frequent intervals, but that the Department would enforce the practice if requested by the growers' organisation to do so.

**Frost Damage.**—Mr. E. S. West, of the Research Station, Griffith, raised the question as to whether smudge gives efficient control of frost as distinct from heating. Mr. Savage stated that smudge was not as effective as previously thought, and that heat was the main factor in frost control. Smokeless heaters are in vogue in America, where the cost of frost control was approximately £12 per acre per annum. Plant for orchard heating was stated in America to cost £10 to £12 per acre, but oil drums would serve the purpose and briquettes would be suitable fuel. The usual practice was to have one heater to every four trees in addition to a ring of heaters around the orchard.

**Pruning of Canning Peach Varieties to overcome tree injury to fruit.**—In reply to a suggestion for a new type of pruning, Mr. Savage pointed out that this was already in the hands of the Peach Improvement Committee. This

Committee was considering all causes of blemish in Peaches, and further trials were being carried out in co-operation with the cannery manager, and a report would be prepared at the end of the canning season.

**Pollination of White Adriatic Figs and Drying of Figs.**—It was mentioned that the canners were complaining of cross fertilisation in Figs secured from the Mirrool area, the white Fig being pollinated apparently by a darker variety and the seeds having kernels. Efforts to trace the source of the cross fertilisation had not yet been successful. Mr. G. W. Beverley, Senior Fruit Instructor, stated that an extra good sample of dried Figs had been obtained this season, possibly due to the cross fertilisation which depreciated the fruit for canning.

**Cross Pollination of Almond Varieties.**—It was stated that Mr. W. Peggendorff, Assistant Plant Breeder, had recently prepared a report in connection with suitable pollinisers for the different varieties of Almonds, and this would be available shortly.

**Reconstruction of Bearing Fruit Trees Injured by Rabbits.**—The opinion was expressed that where the damage to fruit trees by rabbits was severe, it would be necessary to cut them off at ground level and insert three or four scions gradually eliminating them as they grew until only one remained from which a new tree could be formed. To prevent damage by rabbits a linseed oil and sulphur mixture could be applied to the tree trunks, but in securing control in this way the heating of the mixture was important.

## JUDGING AT SYDNEY ROYAL SHOW.

Mr. O. C. Barberie, of Batlow, N.S.W., wrote a letter recently to the Sydney press about the judging in the fruit section at the Royal Show. Mr. Barberie says the judging is one of the most puzzling things, both to exhibitors and also the public who have a good knowledge of fruit. A case in point was where 3in. Winter Cole Pears received the first prize for export, and in the open class the same Pears in every way were not given a place, and the prize was awarded to much inferior fruit, as the judge said it was too large for commercial purposes. The same could be noticed right through the exhibits, especially in Apples, where the first prize fruit would not bring anything like as much as the discarded fruit. Again, the answer was "too large for commercial purposes." Seeing that the larger fruit of high quality (not outsize) is always sought after by the best buyers, the action is inexplicable. The smaller traders like fairly small fruit, as they count out better, and with much more profit, but the general public as a whole likes big, sound good colored fruit, and prizes should be given for that class, and it is very discouraging to growers when beautiful specimens, which the public like to see and would buy for preference, are discarded for reasons mentioned.

**Apple Export from Leeton.**—Good prices have been realised in Liverpool for 1,000 cases of Apples shipped by the "Orestes" in February last, on account of Mr. Ben Jones, of Leeton, N.S.W. Prices were:—Granny Smiths, 10/6 to 14/-; Jonathans, 9/- to 12/-; King Davids, 9/6 to 10/6; Cleos, 9/- to 12/-; Delicious, 8/6 to 10/9; London Pippins, 8/6 to 10/-.

# Seasonable Cultural Notes.

## Citrus Marketing and Export

(Republished from the "N.S.W. Agricultural Gazette.")

With the exception of Emperor Mandarins, the crop of which is heavier than last season's, citrus yields are below the heavy production of last year. The absence of a market in New Zealand is a very serious loss, whereby practically the whole of our citrus crop will be thrust on to the local (Australian) markets, only a small proportion (about 3 per cent.) being absorbed by the United Kingdom, the Far East and the Canadian market.

Growers are urged to avoid holding back consignments. High returns cannot be anticipated, and holding off marketing to take advantage of temporary price increases is likely to result in price levels declining more rapidly. It is therefore recommended that smaller consignments be dispatched regularly and over as long a period as possible. Advantage will accrue, too, as a result of marketing only the best selling sizes in the better grades. Small sized fruit for the variety in all grades and any sized fruit in, say, plain grade is generally only going to depress values.

In order that local markets may be relieved of supplies as far as possible, every opportunity to export fruit should be grasped. With monetary fluctuations in overseas countries of frequent occurrence, highly profitable returns are not likely, but if the demands of the market are properly studied and conformed to, the prospects are sufficiently good to warrant participation in such trade.

### Citrus for Export.

Oranges will be exported to a number of overseas markets. The main outlet for Lemons is Canada; smaller amounts are taken by the East, which market may also be an outlet for Mandarins.

Oranges for export must be of good quality. The most desirable sizes range in count from 216 to 262 per case, representing fruit ranging from 2½ down to 2¼ inches. A small proportion of slightly larger, also smaller, fruit may be included in the consignment, but counts outside 176 to 288 are not desirable. Packing in special export cases which contain about 1½ bushels is necessary.

The Canadian and Eastern markets are accustomed to mature (sweet) fruit, and in the former case, at least, to very well-packed, full cases. The markets in the United Kingdom, on the other hand, are annually supplied by Mediterranean growers with fruit which early in the season is scarcely mature, and is not so highly standardised in its presentation to the trade. Competition with Brazil, South Africa, and California, however, must be met, in which an increasing standard of efficiency is evident.

Lemons for export should be partially cured to minimise shrinkage and decay. The popular trade sizes range between 300 to 360 per case (1½ bushels), representing fruit from 2½ to 2¾ inches in diameter. The fruit needs several weeks' storage to ensure that it is partially cured—at least three or four weeks during the winter months. It should be selected only from trees in good condition and grown on soils favorable to its regular development, and it should be carefully clipped.

Mr. A. T. Hunter, Senior Fruit Instructor, states that on soil and in some degree on weather conditions, depend mainly the development of Lemons. Where the development is uninterrupted and gradual, medium to large sized fruit is obtained, which (other things being equal) is of high vitality and therefore keeps well in storage. Weak fruit develops more erratically, and may at times mature when not more than small or medium size. One indication of weakness is irregularity of coloring, such as a ten-

## ∴ Pest and Disease Control.

dency to yellow rapidly in parts instead of silvering uniformly. Such fruit should not be stored long or exported.

The amount of shrinkage which may occur in a storage period of six or seven months without the fruit losing in condition may range over 35 per cent. Small-sized fruit at picking (say, of 2½ inches diameter) may be reduced by 40 per cent. and still be in firm marketable condition.

Where it is proposed to store over four months and it is not possible to control humidity, the Lemons should be harvested when they are green or not more than silvery in color, and they should not be clipped too small, as 2½ inch diameter fruit may shrink to 2¾ inches. The storage life is greatest when the fruit is green when clipped, but it should not be too immature or shrinkage will be accentuated. The regular harvesting (at about monthly periods) of fruit of the color first-mentioned when of a size over 2½ inches in diameter should permit of long storage and result in good returns, assuming that the point as to gradual and uniform change of color is also observed.

### San Jose Scale and Peach Leaf Curl.

#### Treat Young Trees Before Planting.

It is a common occurrence to see young deciduous trees infested with San Jose scale and Peach leaf curl a few months after they have been planted out in the orchard. In a reminder to readers on this subject, Mr. R. B. Thomas, Orchard Inspector at Westmead, N.S.W., recommends that, on receipt of the young Peach and Nectarine trees from the nursery, they be treated with Bordeaux mixture (6-4-40) and an oil spray, combined at the rate of one part of oil to twenty parts of the total mixture. Some growers may prefer to use lime-sulphur, which is just as efficacious. This latter spray should be at full winter strength. Apple, Pear and similar trees should be treated with miscible oil only.

As to the method of treatment, the young trees could be sprayed while in the trenches prior to planting out, or, after pruning preparatory to planting, they could be immersed in a cask of the spray, being plunged up and down a few times to ensure a uniform coating of spray over the whole of the plant, particularly the waxy-like surface of the young bark.

The roots of young trees should not be dipped in any spray or spray mixture that contains oil.

#### Treating Established Trees for Peach Leaf Curl.

Extensive field trials conducted by the N.S.W. Department of Agriculture have shown that Peach leaf curl is easily and effectively controlled by spraying, either by Bordeaux mixture or lime-sulphur at winter strength, provided the spraying is carried out while the trees are still dormant, but just before the buds swell. Care should be taken to cover every above-ground part of the trees, especially the extremities of small limbs and twigs, with spray.

Experiments have shown that in some districts 6-4-40 Bordeaux mixture, which is weaker than winter strength, will control the disease. In isolated cases growers have found it necessary to spray twice for Peach leaf curl control, one application being given just before the buds swell and the second when the flower buds are showing color. Such cases, however, are rare.

#### Treating Established Trees for San Jose Scale.

The trees should be sprayed during June or July with miscible red oil, one part to twenty-five gallons of water. This spray should be very thoroughly applied so as to cover

all above-ground parts of the trees. Lime-sulphur at winter strength, applied as late as possible before the buds burst, may be used where it is considered necessary to spray for the control of fungous diseases. The infested trees should be pruned before spraying and the prunings carefully burnt at once.

Winter control measures, properly applied, will result in clean fruit, which may be exported safely next season. Particular attention is drawn to this aspect, as stringent regulations exist against the export of fruit infested with this scale.

#### BLACK SPOT CONTROL IN N.S.W.

##### Pruning and Spraying Hints.

As black spot on Apples and Pears was noticeable this season, the Director of Fruit Culture in N.S.W. (Mr. C. G. Savage) recommends growers to prune out and burn all dead and diseased wood; spray with Bordeaux 6-4-40 at spur-burst, lime-sulphur 1-14 at "pink" stage; lime-sulphur 1-35 at "calyx" stage, when petals falling, combined with lead arsenate for codlin and lime-sulphur 1-35 combined with the first, second and third "cover" sprays of arsenate of lead if necessary.

#### FRUIT FLY IN N.S.W.

##### Drastic Measures Gazetted.

Owing to the heavy infestation of fruit fly in N.S.W. last season, drastic measures will be taken to enforce regulations to prevent a repetition. Among other things, growers are notified that they must remove from the trees all of the intermediate crop of Seville Oranges before July 1. All main crop Sevilles, also Mandarins, must be removed before September 30. The use of baits and traps is compulsory.

#### NEW PACKING HOUSE PROPOSED.

Growers in the Hawkesbury and Nepean districts of N.S.W. propose establishing a citrus growers' co-operative society. The object of the society is to enrol at least 75 per cent. of citrus growers who have a minimum of  $2\frac{1}{2}$  acres under citrus in the County of Cumberland or Cook or adjacent defined areas, and to establish a central packing and treating house.

#### NEW SOUTH WALES.

**Coomealla Irrigation Area.**—Ideal weather conditions favored the harvesting and drying of Sultanas. The quantity and quality of the fruit are exceptionally good.

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**Curlwaa Irrigation Area.**—Conditions for harvesting and drying vine and deciduous fruits were ideal. Quality exceptionally good.

**Young (14/5/33).**—Account sales received from George Monro Ltd., London, for Young district fruit per s.s. Ballarat reveal satisfactory prices. Prices for Cleos. range from 11/- to 13/- per case. Condition of the Cleos. on arrival was good, but showed slight bitter pit. The condition of the Jonathans also was reported to be good.

**Young.**—Mr. W. le Gay Brereton, Chief Fruit Instructor, who is investigating the pollination of Cherries, recently inspected Prunes cured at the three local dehydrators, and expressed pleasure at the quality of these processed Prunes.

**Cupertee.**—Heavy crops of good quality Apples and Pears have been harvested. Messrs. Sim Bros. exported about 12,000 cases. Several other orchards sent substantial quantities.

**Hartley.**—The principal export varieties of Apples include Dunns, Jonathan, Granny Smith, London Pippin, and C.O.P. Over 10,000 cases were exported this season. At Little Hartley, Mr. W. S. Cripps was the biggest exporter with 5,000 cases.

#### BANANA CULTURE IN N.S.W.

**T**HE AREA UNDER BANANAS is increasing so rapidly in N.S.W. and Queensland that the N.S.W. Director of Fruit Culture (Mr. Savage) stated recently that in N.S.W. alone the area had increased from 7,400 acres to over 13,000 acres during the last twelve months. He said that many people had entered the industry who were not conversant with Banana pests and as a consequence growers were apprehensive of the future of the industry unless rigid measures were taken to enforce the regulations. Mr. Savage also said that complaints had been received that bunchy top was increasing slightly in plantations on the border of the States. Mr. W. J. Ross, Senior Fruit Inspector of the Queensland Department, and he intended making a survey of these areas in order to report to the Governments of N.S.W. and Queensland as to what measures should be taken for the successful continuation of the industry in those districts. The N.S.W. Banana Growers' Federation had made a small grant to assist in the investigation of the borer beetle and the Commonwealth Banana Committee had also granted assistance. A small insectary was being erected at Lismore with Mr. W. B. Gurney in charge, and Mr. H. C. Wallace would be directly responsible for carrying out the investigations at Lismore.

One thousand acres of choice land have been selected by Mr. Campbell, inspector, for Banana plantations in the Bowraville district. The lots vary from five to 30 acres. In all, it is expected 2,000 acres will be made available. Applications in large numbers are being received for these lots. It is also expected that a co-operative association will be formed.

#### THE OTTAWA AGREEMENT.

"An attempt is being made to create the belief that the Ottawa Agreement provides for all-round reduction of the Australian tariff. In actual fact, it does nothing of the kind," it is declared in a statement issued on behalf of the Lyons Government.

"It provides for certain specific reductions. These have been made. It provides for the application of a formula to determine the margin of preference to British goods. That has been done. It provides for a review of the tariff in accordance with certain principles; that review is being made. It also provides for the introduction of proposals into Parliament after the Government has considered the recommendations of the Tariff Board; those proposals are being introduced after the consideration of the recommendations. Every item of the Ottawa Agreement is being performed in the spirit of the agreement."

#### A Frisky Filly.

"Clarence," said his wife, "who is Flossie?"

"Flossie?" replied the husband, "why—er—didn't I tell you? Flossie, my dear, is the—er—the name of a horse I backed yesterday. It won. Here's a fiver for you."

"Clarence," his wife greeted him when he returned home that evening, "you know the horse you backed yesterday?"

"Yes."

"Well, it's been ringing you up on the 'phone!"

## South Australia.

Fruitgrowers have been heartened by the prices so far received for Apples and Pears on overseas markets. Up to May 13, the quantity exported was 231,000 cases Apples and 14,583 cases Pears.

The South Australian Fruitgrowers and Market Gardeners' Association is continuing its useful activities. At the Executive meeting on May 26 there was an animated discussion regarding proposed improvements in marketing and the system of payment by customers. Reports by the Celery and Citrus Committees revealed the good work accomplished this season. The report on junior Apple packing showed the keen interest which is being taken in this enterprise.

**Fertiliser Rebate.**—At the April meeting, Mr. F. C. Staniford presiding, the Secretary (Mr. W. J. Kimber) reported that an important concession on fertilisers had been arranged and that the requisite application forms for rebate were obtainable from him. Messrs. F. C. Staniford, W. J. Bishop, L. J. Wicks, W. H. Packer, N. T. Hobbs, and J. Mitchell were appointed a sub-committee to arrange with merchants the best system of payments.

**Citrus Drinks.**—On behalf of the Citrus Committee, Mr. Hobbs stated it was essential to improve the quality of citrus drinks offered to the public. The Committee was negotiating with a firm for increasing the popularity of citrus drinks, and the hearty co-operation of growers was sought.

**Interstate Trade in Celery.**—The Secretary reported that agents had been appointed in Melbourne, Sydney, and Brisbane, each having signed the necessary agreement: 50,000 recipe folders were being distributed. Several new members had been enrolled.

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The annual meeting of the Central branch of the South Australian Fruitgrowers and Market Gardeners' Association was held on May 26. The monthly meeting of the Marion branch will be held on June 7 (J. R. Duncan, Secretary). At the Campbelltown branch on June 12 (W. Pitman, President) an address on the preparation of Celery for interstate markets will be delivered by Mr. R. Quinn, inspector.

### Adelaide Plains Citrus Growers.

At the annual meeting of the Adelaide Plains Citrus Section of the South Australian Fruitgrowers and Market Gardeners' Association, held at Salisbury on May 12, the President, Mr. G. Jennings, extended a cordial welcome to visitors from the Torrens Valley and urged united action. The Association had been the means of holding the price of Oranges at a fair price—7/- to 9/- a case in November—which would not have been possible but for the Association.

The Secretary, Mr. Kimber, reported that the price-fixing committee had done good work; more attention was necessary in the matter of the consumption of citrus as fruit drinks. Some S. Aust. Oranges had been condemned in Victoria as not fulfilling the maturity standard. Uniform interstate maturity standards were necessary. The possibilities for the success of a company for making citrus drinks and by-products were explained by representatives of Preservers Limited.

**Crop Prospects.**—Crop prospects were reported from Salisbury, Torrens Valley and Sandy Creek as follows:—Navels fair to medium, Mandarins light, Poorman Oranges fair, Lemons light to medium.

Office-bearers were elected:—President, W. H. Pitman; Vice-President, F. W. Sayers; Hon. Secretary, W. J. Kimber.

A MEETING of the Executive of the South Australian Fruit Marketing Association was held at Adelaide on April 28, 1933. There were present:—Messrs. H. N. Wicks, M. G. Basey, J. S. Hammatt, R. O. Knappstein, D. W. Hannaford, R. B. Pritchard, R. A. Cramond, A. O. Peterson, J. B. Randell, G. Quinn, G. W. Selth, A. R. Willsmore, M. Vickers, T. Playford, P. R. B. Searcy, E. S. Mason, and the Secretary (E. W. Mills). Apologies were received from Messrs. H. J. Bishop, B. W. Dearman, and F. B. James. Mr. J. B. Randell presided.

**Finance.**—Financial statement showing balance in bank £110/14/9 was adopted.

**Correspondence.**—Letter from the Hon. F. H. Stewart, Minister for Commerce, in reply to protest sent by the Association in regard to the Minister's remarks which appeared in the public press stating that the shortage of freight for South Australia had been brought about by the "ineptitude" of those representing the fruit exporters of South Australia.

The Secretary read correspondence giving resume of the position which had been sent to Messrs. J. L. Price, J. M. Gabb, and F. H. Stacey, South Australian representatives in the Federal Parliament. A reply to the Minister's letter, drafted by Mr. H. J. Bishop, was read and approved by the meeting, and it was resolved that it be sent on to the Minister, and a copy to the three Parliamentary representatives mentioned above.

**New Freight Agreement.**—Letter from Australian Apple and Pear Export Council advising that they were awaiting notice from the shipping companies of their desire to enter into a new discussion on the freight question. Letter from the Government Produce Department advising that the Ministers of Agriculture of the various States would hold a Conference in Sydney shortly and the following item had been placed on the agenda paper at the request of this State:—"Fruit freight and that growers' interests in the distribution of freight should be preserved."

The Department asked that this Association should let them have any suggestions on the matter, and it was resolved to make the following suggestions:—

(1) Particular stress should be laid on the fact that since the inception of this Association the forecasts supplied to the Shipping Association have proved to be extremely accurate, whereas it is felt by the members of this Association that forecasts supplied by other States have been inflated, and as a result of the inflated forecasts they have been successful in obtaining more than their proportionate share of the available freight.

(2) We suggest that this Association should be invited to send a nominee to a Conference of shippers and ship-owners when the question of allocation of space to the States is to be discussed.

(3) That all States should guarantee their forecast figures, and in the event of reduction being necessary as time went on, they should only be entitled to be relieved on a pro rata basis.

The Association appreciates there are difficulties in carrying out this latter suggestion, but the idea is to prevent any State from unduly inflating their forecast figures, and by this means securing practically all the freight they require to the detriment of a State which gives honest and accurate figures.

Letters from Australian Apple and Pear Export Coun-

cil, enclosing copy of letter from Department of Markets re proposed French duty on fresh fruits.

Letter from Australian Apple and Pear Export Council, advising registration of telegraphic address "Appearcil, Melbourne."

Letter from Australian Apple and Pear Export Council, enclosing copy of additions to Bentley's code covering different varieties of Apples and Pears.

The annual report from Chief Horticultural Instructor for year ended June 30, 1932, was received.

**Mr. G. Quinn.**—Mr. H. N. Wicks advised that as a result of resolutions passed by various Agricultural Bureas throughout the State, he, as Chairman of the State Advisory Board of Agriculture, had attended a deputation to the Minister of Agriculture, and presented a petition asking that Mr. Quinn's term of office be extended for a period necessary to enable an understudy to be trained in his methods, and to allow Mr. Quinn to complete the work, and records, on which he has been engaged for many years, and which, when finalised, will be of such great value to the agricultural interests of the State generally, it was resolved that this Association support by letter the petition that had been presented asking for the retention of Mr. Quinn's services for a further period.

**Research Sub-Committee.**—Mr. H. N. Wicks reported the tabulation of records in regard to manurial tests and the conclusion of the codlin moth tests for this season.

Enquiries were also being made into complaints in regard to certain brands of arsenate of lead, and members had been asked to bring to the next meeting information in regard to the brand of arsenate of lead used, the number and date of applications, and the results obtained.

It was also reported that the work in connection with the thrips campaign under the control of the Waite Research Institute would be in full swing this year.

It was resolved that the Secretary write the Minister of Agriculture asking if he would be prepared to receive the same deputation that waited with his predecessor in office, and asked for a donation of £200 per annum for three years towards the funds of the league.

**S.A. Vinegrowers.**—At the annual meeting of the South Australian Vinegrowers' Association, Mr. R. H. Martin was elected President. Vice-President, L. N. Salter. Council: C. M. Hardy, S. E. Tolley, A. W. R. Smith, A. W. Graves, Hugo Gramp, L. R. Seppelt, Herbert Kay, B. T. Durien, B. W. Bagenal.

Mr. Tolley, retiring President, urged that the name of the Association be altered to that of the "South Australian Viticultural Society," as much misunderstanding arose by use of the word "vinegrowers."

#### SOUTH AUSTRALIAN FRUIT IN U.K.

The acting general manager of the Government Produce Department, Adelaide (Mr. P. Cruickshank) advised on May 9 having received the following cable from the Trade Commissioner (Mr. C. F. G. McCann):—

"Merioness has landed Glasgow shipment of Apples in excellent condition, but the fruit is showing bitter pit. Jonathans are selling from 12/6 to 13/6; Cleos. at 13/6 to 14/-; London Pippins at 11/- to 12/6, gross Glasgow.

The demand is good, but tendency is downward. London demand is good with Cleopatras and Jonathans selling at 12/- and London Pippins at 11/- per case gross. The tendency is downwards."

## Mid - Murray Notes.

### Value of Green Manuring—Drying and Vintage Notes—Field Demonstration at Renmark.

**Renmark (20/5/33).**—It is not often necessary to have a second "special" irrigation on crops of legumes planted as cover crops, but this season being particularly dry up till quite recently, a second "special" was given early in May. During the time of the first cover crop irrigation (about the middle of March) many growers were still picking Sultanas and were too busy to plant their cover crops; however, a fairly large area of both peas and beans was subsequently sown with the later "special."

#### Green Manuring.

At a meeting of the Renmark Agricultural Bureau last month, Mr. O. Weste read a paper on "Green Manuring," after which a discussion followed on the merits of planting cover crops before or after an irrigation. It was pointed out that where land is low lying and subject to inundation for several days, peas do not germinate well, and some varieties rot through excessive moisture, but on ordinary, gradual slopes, it is preferable to sow before irrigating. Low-lying patches of land should be sown after an irrigation, and cultivated or disced into the soil, upon which germination will be found to be quite satisfactory.

Another matter of major importance in the growing of green manure crops is the need for getting the crop ploughed under while the soil is damp so that proper nitrification can take place. Many growers in this area who had not previously planted green manure crops, made a vital mistake in allowing heavy crops of beans to continue growing long after they had reached maturity: last season, during the later period of their growth we experienced very drying weather, and just at a time when the young feeding roots of the vines were feeling their way out for moisture, these crops of beans had the lion's share and the vines suffered in consequence.

It was generally accepted at the meeting that one of the greatest needs in growing cover crops is to get them matured by the end of June, so that a long period of nitrification may take place.

**The process of Nitrification** takes from six weeks to two months, according to the nature of crop grown, and when a cover crop matures and is ploughed under just before bud burst, a definite nitrogen deficiency occurs just at a time when the plant most needs some stimulant to give it a "kick" for the new season's growth, and in that case the nitrogen stimulant must be given in artificial form.

In the event of a green manure crop being ploughed under during September, by the time this becomes broken down by bacterial action and is available as plant food, it will probably be some time in November. This is a critical month for vine fruits, as the setting takes place early in the month, and should the vines receive the full stimulating effect of the cover crop at this time, there is a danger of bad setting.

Soils in these parts are naturally deficient in organic matter and nitrogen and the greater weight of legumes we can put back into the soil the quicker we can build them up to better production. For a great many years it

had been accepted as natural philosophy that the greatest production from our vines came up to the eighth year, after which they settled down to a lesser return. This theory has now been upset by continual growth of leguminous cover crops, which has so altered the position as to not only maintain the production of the peak period, but has actually increased the cropping after the eighth year.

Green manure crops have the power to change the physical nature of a soil as well as the mechanical nature. In this way we see a stiff clay soil become friable and better able to stand the drying out effect of a hot summer sun, and a loose sandy soil becomes more consolidated and thus having a better moisture-holding capacity.

Having in mind the great value of green manuring, growers in these parts are now growing a cover crop in every row of Currants, and instead of leaving a row unplanted for the purpose of throwing in the cuttings and raking them out to be burned, the cuttings are thrown on top of the growing crop. When ploughing time comes, a disc coulter attached to the plough cuts them up and in this way the whole yearly growth is returned to the soil.

Sultanas, on the other hand, are not so easy to dispose of, owing to the heavier nature of the growth, but by

A field demonstration with Malcolm Moore's Universal Vineyard implement, and Howard Auto Rotary Hoe, took place at Messrs. Basey and Howie's block on Thursday last, and at Mr. Geo. Kubank's block at Block E, on Friday.

A big muster of interested growers assembled to watch the trial, which passed off very satisfactorily. The soil on which the implements worked was of a particularly stiff nature, and placed a severe test on any trial, but the demonstrators proved equal to the occasion.

Lucerne and paspalum proved no bar to the working of these implements, and comments were of general approval on all sides.—“Nemo.”

## SOUTH AUSTRALIA.

**Barmera (May 9).**—The Barmera Co-operative has almost completed packing operations for this season, and a record tonnage has been packed. Only a few tons of Lexias are still to come in.

The quality of the fruit is particularly good, 70 per cent. being 4 and 5 crown grades. The Sultanas are well up to standard, and their quality has provided justification of the merits for standardised practices for, with few exceptions, the whole of the fruit was treated with the

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adopting a scheme of deep trenching with a delver or plough furrow down the centre of the row wherein the cuttings are thrown, the problem of returning even the Sultana cuttings has been solved.

It has been estimated that an ordinary yearly growth of Sultana canes thus returned to the soil would be equivalent to 2 cwt. of 45 per cent. superphosphate in phosphoric acid value alone per acre.

Mr. R. M. Voullaire, Jr., of Merbein, first introduced the system of burying vine cuttings, and the practice is becoming more popular every year.

### Deliveries of Gordos

to the Moray Park Co. for the purpose of dehydrating them into high-class table Raisins, is now completed, and although early deliveries have been conspicuous for their lack of a high Baumé test, the later fruit had notably an increased sugar content, which should enable this company to maintain the high standard of their products.

### Activity at Distilleries.

Both distilleries have now almost completed the crushing operations, and the real work of wine and spirit making is in full swing. Deliveries were quite satisfactory, as the whole of the available fruit was utilised.

standard C.I.S.R. dip. The pack of Lexias totals about 540 tons, which trebles the shed's previous large tonnage for any one season. As regards quality, the present pack is the best ever handled from this area.

### ORANGE GROWING IN ENGLAND.

Orange trees planted as an experiment near Falmouth, Cornwall, about five years ago, have recently been declared such a success that it has been decided to plant a further two thousand trees.

The “Monkey” Grubber is stated to give the user the power of 260 pairs of hands in a simple and compact form. It is taken to the job on a pair of wheels like a barn truck, and is rigged for work in a few minutes. For further information, see the advertisement of Messrs. Trewella Bros. Pty. Ltd., Trentham, Vic.

Neptune White Spraying Oil will be found excellent for obtaining clean fruit and healthy trees. The strengths at which to spray are stated in the booklet entitled “Neptune White Spraying Oil,” which is obtainable free on application to the Neptune Oil Co. Ltd., 52 River-street, Richmond, E.1.

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*This is what  
eats into your  
Profits*

The losses caused by Codlin Moth reach a colossal total each year, and greatly reduced profits to the fruitgrower result from orchards affected by this pest. It is the aim of the fruitgrower to proof his orchard against attack from Codlin Moth by covering his fruit with an unbroken poison film, thus ensuring the maximum protection.

The Codlin Moth hasn't a chance to damage the orchard properly sprayed with "Aero" Brand Arsenate of Lead. It has proved the orchardist's surest safeguard against infection, and ensures the fullest yield of clean fruit, and highest market returns.

Leading orchardists all over the Commonwealth have proved the efficacy of "Aero" Brand Arsenate of Lead, and are unanimous in their verdict that it is the finest Arsenate of Lead on the market.



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"AERO" BRAND ARSENATE OF LEAD

is here separated from the water in which it is precipitated.



Since this photograph was taken it has been found necessary to still further extend this press, and it now contains fifty per cent. more frames than here shown. This has been rendered necessary by the continually increasing demand for "Aero" Brand Arsenate of Lead, which Orchardists throughout the Commonwealth, who have used it, unanimously agree is the finest grade Arsenate they have ever used.

We have scores of testimonials from Orchardists who have safeguarded their profits by spraying their Apples and Pears with this superlative product. We were the first makers of powdered Arsenate in Australia, and "Aero" Brand is the result of years of research in our chemical laboratories.

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# Cold Storage In Australasia

ORCHARDISTS AND COOL STORES' ASSOCIATION  
OF VICTORIA.

**A**T the 15th annual Conference of the Orchardists and Fruit Cool Stores' Association of Victoria, held at Mornington on May 25 and 26, Mr. A. E. Hocking presiding, resolutions were carried requesting remission of sales tax on refrigeration plants and repairs, calcium chloride and other commodities used in fruit cool stores; that spraying oils be admitted free of duty; that the scientific research staff of the Department of Agriculture be increased; that Apples and Pears be sold by number instead of by weight, and to confer with the Retailers' Association on this matter. The Department of Agriculture was thanked for its efficient country inspection of export fruit, and a vote of appreciation was also carried to the Railways Department for the able manner in which the record expert quantities were transported.

Delegates attended from various parts of Victoria, and there were visitors from New South Wales and Queensland.

Mr. E. H. Hatfield submitted an appreciated report dealing with his investigations regarding the production of an aerated Apple drink and Apple jelly.

Mr. W. Ranger, Manager, Committee of Direction of Fruit Marketing, Brisbane, gave an appreciated address detailing the genesis and operations of the marketing of Queensland fruit under the powers conferred by Act of Parliament. This Act, stated Mr. Ranger, gave the growers power to control their own industry. It was in no sense Government control; the fruit industry had received remarkable benefits. At the request of the Chairman, Mr. Ranger agreed to defer his return to Queensland in order to confer with a Committee of the Association to discuss the possibilities of introducing a compulsory system in Victoria along the lines of the Queensland method—for which an Act of Parliament would be required.

Mr. Willis S. Williams, F.C.S., Superintendent of Markets, Sydney, detailed the system of the marketing of fruit in Sydney.

Mr. S. C. Brittingham, late Chief Architect, Public Works Department, gave hints regarding methods for lengthening the life of cool store buildings. Concrete buildings were advocated as being the best and cheapest in the long run and taking into account insurance on buildings and fruit.

"Automatic Control in Refrigerating Plants" was the subject of an address by Mr. R. Wilkinson, State Electricity Commission. The direct expansion system had many advantages and lent itself to automatic control.

Mr. R. Werner gave appreciated information regarding the best method of preserving refrigerator coils.

Mr. E. H. Hatfield said that at the close of each season he sprayed the chambers with oil to act as a preservative and to check any fungus growths.

Regarding the best method for an alarm for persons

In response to many requests, the "Fruit World" is now reserving this special Fruit Cool Storage Section to deal with the everyday problems of the cool store manager and refrigerating engineer, from whom enquiries are invited. Practical cool storage notes of interest are also invited from readers. Address correspondence to Practical Refrigeration Department, "The Fruit World," Box 1944, G.P.O., Melbourne, or 439 Kent-street, Sydney, N.S.W.

accidentally locked in cold storage chambers, several suggestions were made—electric bell, or a switch to show a red light outside. The Secretary, Mr. Aird, said the best method was that now installed in many stores—a lever capable of being operated from inside or outside the chamber.

Mr. G. B. Tindale, B.Agr.Sc., spoke on "The Cold Storage of Williams Pears" (recommending temperature 30-32 deg. F.; humidity 80 per cent.), and Mr. E. H. Hatfield on "Weather and Fruiting"; Mr. Heughan, of the "Herald" newspaper, Melbourne, propounded a publicity plan for increasing the consumption of Apples, and offered preliminary services. All of the speakers were cordially thanked.

Office-bearers were elected as follows:—President, Mr. E. H. Hatfield, Immediate Past President, Mr. A. E. Hocking; Vice-Presidents, Messrs. Williamson, M.L.C., and F. Petty; Delegate to Chamber of Agriculture, J. H. Lang; Delegate to Employers' Federation, A. E. Hocking; Delegate to Southern Fruitgrowers' Association, J. G. Aird; Hon. Secretary and Treasurer, J. G. Aird; Auditor, J. W. Barrett.

## Visits to Cool Stores.

On the afternoon of May 26 visits were paid to cool stores and packing houses as follows:—Somerville Co-op., J. Brunning & Sons; Tyabb, Hastings and Red Hill. At Hastings afternoon tea was daintily served by the ladies. (Report much condensed. More details next issue.)

## APPLES IN COLD STORAGE.

### Oil Paper for Granny Smiths Recommended.

**G**RANNY SMITH APPLES packed in either peat moss or wood wool do not keep as satisfactorily as those wrapped in oil papers according to experiments conducted by the N.S.W. Department of Agriculture. Mr. H. Broadfoot, special fruit instructor, stated that the Apples used for experimental purposes were grown and packed at the New England Experiment Farm, Glen Innes. Ten cases were enclosed in sulphite papers and embedded in wood wool, and an equal number of cases also in sulphite papers but embedded in peat moss. These were placed in cool stores on May 18 last year and were examined on November 19. It was found that the fruit packed in the peat moss was much less affected with scald and blue mould than that in the wood-wool. The number of damaged Apples was high even in the peat moss cases, for out of 540 Apples stored, 114, or nearly 20 per cent. were affected by scald.

In cold storage tests at Batlow, scald damage had been reduced to about 2 per cent. by delayed storage and enclosing the Apples in oiled papers. Thus, although the peat moss gave some control, the oiled papers were much more satisfactory. The moss left the fruit in dirty condition, and the dust adhered to the oily surface of the fruit, which would have to be removed prior to sale. Packing and storage costs would be higher with the peat moss.

**WILT-RESISTANT TOMATOES.****Varieties Successfully Tested in N.S.W.**

Mr. N. S. Shirlow, Assistant Plant Breeder at Hawkesbury Agricultural College, N.S.W., and Mr. C. J. Magee, Assistant Biologist, have developed a method for testing the resistance of varieties and strains to Fusarium wilt. In some cases, highly susceptible varieties had been found 100 per cent. infected, after being inoculated with the disease.

The fungus disease, Tomato wilt, is being controlled in market garden crops by the extended culture of resistant varieties. Marglobe and Break of Day could be classed as second early and were suited for main crop growing. Different strains of Marglobe exist, and some have been found susceptible to wilt, but the Department is now increasing the seed supplied of the strain found resistant to the disease to enable it to be distributed.

Amongst the most resistant varieties tested locally, a new variety, Pritchard, ranked with Marglobe and Break

of Day. The high degree of resistance to wilt possessed by the Red Currant Tomato attracted Mr. Shirlow's attention a few years ago. Some crosses were made with this with the object of producing a commercial variety with the same degree of resistance. The cross was Earliana, grown into the third generation last season, and was showing individuals of promise. Mr. Magee had pointed out that there is still greater need for the development of a wilt-resistant variety suited to glasshouse culture. The variety M.C. from Palestine is the most promising variety at present for this purpose.

**No Good for Nothin'.**

Mandy: "Yo-all reminds me of one of them flying machines."

Rastus: "How cum, woman, how cum! Cause I is such a high flyer?"

Mandy: "No, sah, culled man; it's jest 'cause you ain't no use on earth."

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THE GRADING ELEMENT IS ADJUSTABLE TO GIVE THE EXACT COUNT YOU DESIRE

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Manufactures include:—A Full Line of Horse and Tractor Ploughs, Rigid and Spring Tine Cultivators, Disc Cultivators, Harrows, etc., for the Citrus Grower.  
BOX HILL : : : MELBOURNE : : : VICTORIA.

## The Re-working of Fruit Trees.

**T**HE RE-WORKING OF FRUIT TREES is an important feature of orchard work. Following the recent articles in the "Fruit World" on this subject, numerous letters have been received from readers.

The following information is to hand from Mr. T. E. Butler, of 358 Collins-street, Melbourne, who arranged for Mr. Frank Page, of Huonville, Tasmania, to visit Victoria recently to demonstrate the new method of re-working fruit trees.

1. The principle lies in retaining the main limbs or leaders of the tree, and re-furnishing these limbs with a number of small scions, grafted in such a way that, after two years, a tree representing the newly grafted variety will have equalled in development, or probably surpassed, the original tree.

2. Strip bare all main limbs which it is desired to leave in the tree, leaving two or three pieces of young wood on the ends to draw the sap along the limb. These may be cut off the following year, or, if the time and trouble be warranted, a scion may be grafted with a "cleft" or other suitable graft. With a tree making vigorous growth a proportion of the spurs of the original variety could be left on the limbs if desired, and a crop of fruit produced on them while the scions of the new variety were coming into bearing in the second year after grafting.

3. The general method of grafting the scions is as follows:—A chisel is driven into a limb to a depth of about  $\frac{1}{2}$  in. to  $\frac{3}{4}$  in.; and into the hole made in this way a scion is driven tightly with a mallet after having first been sharpened to a double-sided point. The joint is then sealed with some suitable material to exclude moisture.

4. Chisel.—Two sizes are required, i.e.,  $\frac{3}{8}$  in. and  $\frac{1}{2}$  in.; the former for use on the thicker parts of the limbs where the larger scions may be used, and the  $\frac{1}{2}$  in. size on the thinner ends of the limbs where smaller scions may be introduced into the smaller chisel holes. The chisel should be thick in section, and the usual "registered" type is suitable. When the chisel is bought it will have a point only about  $\frac{1}{2}$  in. long. It should be ground to a point at least  $\frac{3}{8}$  in. long.

In driving into the limb the chisel should be held with a long point towards the limb and the bevel upwards; and it should be held at an angle of about 45 degrees to the limb, so that the scion may be inserted at an angle as natural as possible.

5. Making the Chisel Holes.—The number of scions to be grafted into a tree depends entirely on the ideas of the grower; but for practical purposes it is suggested that they may be inserted, say, every 15 in. on each side of each limb, with alternate spacing so that, counting each side of the limb, a scion would be grafted every  $7\frac{1}{2}$  in. It is most advisable to make all the holes with the chisel on all limbs of the tree before any of the scions are inserted, as otherwise the vibration may loosen the scions after they are driven in, but before they are waxed; and, further, in using the mallet on one limb the scions on an adjoining limb may be in the way.

6. The Scions.—The scions should be in good grafting order, i.e., not too dry nor too forward in growth. They should be cut into short pieces about, say, three buds long, with the upper end cut square to assist in driving the scion into the limb. This upper cut should be immediately above the highest bud, leaving a section as long as possible for pointing the next succeeding scion. A point about 1 in. long should be cut, bevelling both sides of the scion, similar to a screw-driver point.

7. Inserting the Scions.—The scions should be driven tightly into the chisel cut with a light wooden mallet—a piece of heavy hardwood or jarrah about 2 in. x  $1\frac{1}{2}$  in. x 1 in. long, with a shaped handle, is quite satisfactory—and care should be taken to see that the scion is driven just deep enough so that the top of the cut on the scion is visible outside the hole. This, of course, is to permit the contact of the edges of the bark. Care should be taken to see that the hole has sufficient width, i.e., that a  $\frac{3}{8}$  in. chisel is used for the larger scions, as if the bark on the scion be torn or ruffled in driving into the hole, naturally good results cannot be expected.

8. Sealing the Scions.—When all the scions have been driven in, a sealing material must be applied as early as possible, and necessarily before any rain or dew can enter the cut. There are several materials that would be suitable for this sealing, including several high melting point greases; but the most successful agent used up to the present is wax made from equal parts of beeswax, resin, shipwright's marine glue (a kind of plastic pitch), and tallow. The whole of the above ingredients are melted, and the resultant conglomerate wax is kept fluid over a slow fire, and applied with a brush in a not too hot condition. Of course, the wax may be made in fair quantities in advance and remelted when necessary. In order to assist growers, quantities of wax ready prepared are being made available. The molten wax sets quickly around the cut, and seals it against moisture, and also reinforces the grip of the scion in the limb. An effort is being made to find a satisfactory sealing material that will obviate the use of the fire-pot in the orchard, but under practical conditions a fire is not a very great disadvantage, as two or three tins can be utilised, and some can be warming while others are in use. This sealing process is one of the most important; and no matter how conscientiously it may be done, it is extremely easy to miss small sections of the cut through air bubbles forming under the molten wax which will later open when the bubble bursts. It is most advisable, therefore, to examine carefully each side of each limb.

9. Generally.—It is important that this work should not be attempted in damp weather; and the trees and scions must be quite dry. The work may be done at any time between, say, June 1 and the end of December, as naturally there is no need to wait for the bark to be free in the early part of the season; and in the late part of the season all that matters is to have the scions carefully preserved by either completely burying them under



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a sand-bank, or holding them in cool store, or some similar method. It will be noted that a very large quantity of scions is required, and it is advisable to save them early in the season, as the early-pruned young wood is the best. After the scions have been inserted, but before they are waxed, it is helpful to apply to the top of each of them a thin film of grease of a high melting point, as this prevents the sap from running back, and enables the growth of the scion to commence much earlier than would otherwise be the case.

Where limbs have been sawn off it is advisable to paint the saw cut with wax to exclude moisture and reduce the risk of polystictus infection. Incidentally, this disease is much less likely to attack a tree, the limbs of which are all intact, than one where the limbs have been cut off for the purpose of "top grafting" in the old style.

The application of this new refurnishing method to the grafting of "fertilisers" such as Rokewoods into Jonathans will be found most useful.

#### BROADCAST TALKS FOR FRUITGROWERS.

Growers who take pleasure in "listening-in" to the wireless talks by the officers of the Victorian Department of Agriculture, over 3LO Melbourne, are asked to note the time for these talks has been altered to 6.15 p.m. instead of 7.45 p.m., as previously.

The programme for June is as follows:-

June 13.—"Winter Work in the Orchard," by Frank M. Read, M.Agr.Sc., Senior Horticultural Research Officer.

June 23.—Review of the fruit export season, by J. M. Ward, Superintendent of Horticulture.

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LAUNCH YOUR OFFENSIVE THIS SEASON AGAINST YOUR COMMON ENEMY—INSECT PESTS AND FUNGUS DISEASES IN THE ORCHARD—with the AID OF A

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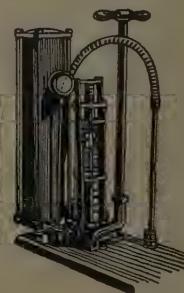


Fig. 513.—BUZACOTT HAND SPRAYER  
The most powerful Hand Pump made. A Compensating Spring relieves the operator of one-third of the load, making extremely high pressure possible with two lines of Hose. Porcelain-lined Cylinders. Brass Ball Valves with reversible seats. Exceptionally large Air Chamber, Patent Packing—no Stuffing Box. PRICE, £17/15/-.



Fig. 502.—BUZACOTT BARREL SPRAYER.

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## Victoria.

More Scientific Research Needed—Also More Packing Instructors.

When moving among orchard districts, one is impressed with the fact that growers are keenly alive to the necessity for continued research work. Whilst appreciating the services which are at present rendered by the Department of Agriculture, it is felt that an increase in the staff is fully justified, considering the importance of the fruit industry to the State. There are some urgent problems awaiting solution, and growers are urging that there should be an increase in the Field Staff of the Department, and that trained men should be set to work to study specific problems connected with pest and disease control.

As regards packing instruction, appreciation is expressed for the services of Messrs. B. Krone and W. H. Harris. Here again the need is felt for an increased staff of packing instructors to deal with the wide range of fruit which Victoria produces. A well known grower remarks that Tasmania has seven packing instructors, in comparison with Victoria's two.

Pakenham (May 15).—110,000 cases of fruit from Pakenham direct were consigned to overseas this season; in addition, 15,000 cases are listed as "various." The total exports from this district reach approximately 120,000. Thousands of cases have been sent to local markets.

## ANSWERS TO CORRESPONDENTS.

**Pulping of Apples.**—"Ajax," West Footscray, asks:—Can you give me information re pulping of Apples—amount of sugar required and time of cooking.

Answer (by Miss A. Knight, Victorian Dept. of Agriculture):—

**To Pulp Apples.**

(1) Peel, core and halve the fruit, put into a preserving pan with sufficient water to prevent scorching.

Place a lid on the pan, so that the steam may help to heat the fruit. Allow to come to boiling heat gently, then retain boiling temperature for 15-20 minutes, or until the sections of Apple are tender.

Have containers scalded, and drained (if glass, they must be made quite hot). Then convey the boiling hot fruit into containers and seal airtight whilst at a high temperature.

The fruit may be crushed during the heating or not, as desired.

Preserved in this manner, the pulp is useful for converting into chutney, sauce, or used as pie filling, etc., and will keep indefinitely, provided it is heated until cooked, and sealed quite airtight whilst at a high temperature.

(2) If preferred, the fruit may be packed into the containers before cooking, the containers then stood in the sterilising vat, and the contents cooked by steam, with this method, the fruit will shrink, in the containers, and will require to be filled to overflowing from a spare can; heated to the same degree. Then sealed airtight immediately. It is not necessary to sweeten the pulp unless desired. If sweetened, this should be done according to taste, and the sugar added when fruit commences to cook.

The sweetening may be added either in the form of a heavy clear syrup, or by adding the dry sugar to the raw fruit.

When peeling the Apples it is an advantage to drop them into slightly salted water as they are peeled, so as to protect color, and prevent them turning brown.

The salt should be well rinsed out before cooking.

## FRUIT SHIPMENTS FROM VICTORIA.

Large shipments of Apples and Pears still continue to be shipped overseas. The s.s. Westmoreland on May 13 took 12,800 cases of Pears to London, followed on the 16th by the Baradine with 13,092 cases Apples and 11,551 cases of Pears to the same port. On the 17th the Anchises loaded 6,672 cases of Apples for Liverpool and 5,385 for Glasgow.

Up to May 19, 1,695,654 cases of Apples, Pears and Plums have been sent to U.K. and Continental markets. London heads the list with 730,819 cases Apples, 350,141 cases Pears and 3,624 cases Plums. Liverpool has received 231,140 cases, while consignments to Hull number 154,313 cases. 76,568 cases were sent to Glasgow and 118,350 cases of Apples and 6,095 cases of Pears were loaded for Hamburg. Small quantities have gone to Bremen, Dunkirk, Antwerp and Oslo.

Later.—Up to May 26, the following shipments of fresh fruit have been made from Victoria:—1,338,122 cases Apples, 372,249 Pears, 3,624 Plums, making a total of 1,713,995.

**Elphinstone (5/4/33).**—About 24,800 bushels of Apples and Pears have been despatched for export overseas.

## CHILDREN'S APPLE PACKING COMPETITION.

Among the trophies and prizes to be competed for in the Children's Apple Packing Competition at the forthcoming Bendigo Show, are six silver cups, donated by Barker, Green and Parke Pty. Ltd., fruit exporters, Melbourne, to the schools in the Harcourt and surrounding districts, which include the following:—Harcourt, Harcourt North, South Ravenswood, Campbell's Creek and Elphinstone.

The children from these schools are attending the "Apple Packing Classes" conducted by the Dept. of Agriculture.

The cups are to be competed for individually and won outright by the six best entries in the competition.

**Fruit Packing Instruction.**—Mr. W. H. Harris, Asst. Fruit Packing Expert, Victorian Dept. of Agriculture, is conducting fruit packing classes during June, as follows:—Monday, Harcourt North and South Ravenswood; Tuesday, Harcourt and Campbell's Creek, evening adult packing class at Strathfieldsaye; Wednesday, Elphinstone; Thursday, Pakenham Upper; Friday, Pakenham, Pakenham East, and Army Road, Pakenham.

**Doncaster.**—A large quantity of Pears is still in cool store. During May the "Baradine" and "Moldavia" took large cargoes of Winter Nelis, Vicars and Keiffers to overseas ports. Fairly large quantities of Packhams are being held for local, interstate and island markets. London prices continue to be profitable, but the market shows a tendency to ease for later shipments. Prices for consignments on the "Turakina" were—B. Bosc, 13/- to 14/-; Packhams, 11/- to 13/-; Howell, 9/- to 10/-. Per s.s. "Maloja"—Packhams, 11/- to 13/-; B. Bosc, 12/- to 14/-; Howell, 9/- to 9/6.

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## VICTORIAN NOTES AND COMMENTS.

"Interested" writes under date May 28 as follows:—

Fruitgrowers have almost finished picking the Apple and Pear crop for another season, and are now finalising their shipment for export. They are also getting the remainder of the crop into the cool stores, and, of course, carrying out marketing operations. The crop this year has been exceptionally heavy for all growers, and from reports from overseas, so far, most growers will be satisfied. The local market is also much firmer in sales and prices generally. Good Jonathans are selling from 4/- to 4/6 per case; Romes, 2/6 to 3/6; Crowns, 2/- to 3/-; Stewarts, 2/6 to 4/-; other varieties according to quality. Good counts of Lemons are selling up to 8/-, others about 5/-. As regards Packhams, Howell and Beurre Bosc Pears, the best of these varieties have either been exported or put into cool stores. The present market price of Packhams is 5/- to 7/-; Beurre Bosc, 4/- to 5/-; Howell and Keiffers, 2/- to 3/- per case. The Passion Fruit market is much easier. Good counts up to 8/-, others 5/- per case. Black spot (*Fusicladium*) has been giving the growers a lot of trouble. I also think it would be wise for them to keep a close watch on their Apples in the stores for bitter pit, otherwise they may have quite a lot of waste later on.

The weather has been exceptionally favorable for the harvesting of fruit crops, but rain is badly needed now to swell the buds so as to give them the chance they require for the following season. What a wonderful water supply the Harcourt and Elphinstone fruitgrowers have! These districts had a very good crop of fine fruit, especially Harcourt, and no wonder with such a cheap water supply almost at their back doors. This supply, I understand, comes from the Malmsbury Reservoir, and is supplied to

most of the growers at the rate of 1d. per 1,000 gallons. What would our Doncaster and other southern growers say if they could get such a supply? What a boon it would be to fruitgrowers in general if there were more of these water supplies running around our barren hills. The writer has in mind one such supply being carried from a reservoir at the foot of Kinglake mountains which could supply all Queenstown, Hurstbridge, Panton Hills and Arthur's Creek, and I am sure it would go a long way to bring these districts back to prosperity.



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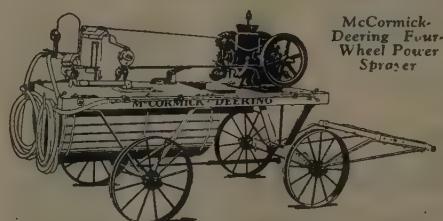
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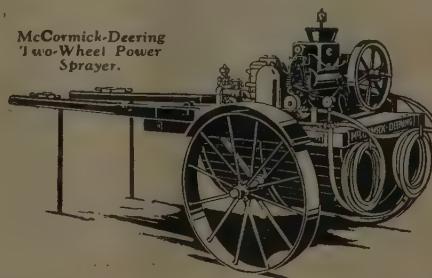
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**TWO-WHEEL POWER SPRAYERS.** — The McCormick-Deering Two-Wheel Power Sprayer is a sturdy, compact unit consisting of a McCormick-Deering 1½ or 3 h.p. Kerosene Engine, a self-oiling duplex spray pump and a 100-gallon vat mounted on two sturdy wheels. Strainer, two lengths of ½-inch discharge hose, director, nozzles and complete set of tools are supplied as regular equipment.

McCormick-Deering Power Sprayers are well designed, well constructed and economical to use. They are light in draught and have a low centre of gravity which makes them particularly suitable for use on hillsides. Any McCormick-Deering agent will be pleased to tell you about these up-to-date power sprayers. Call and see your local agent, or write us for literature.



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# Brown Rot of Stone Fruits.

## Control Measures Discussed.

**O**WING TO THE SEVERE LOSSES caused by brown rot of stone fruits, this subject looms largely in the minds of growers. Appreciation is expressed for the services of the Victorian Department of Agriculture in investigating this obscure disease. Mr. S. Fish, M.Ag.Sc., Assistant Plant Pathologist, is at work on this problem. Mr. Fish is in touch with research workers in various parts of the world where brown rot is troublesome in order to see if a spray schedule can be devised which will control the disease.

While at the present, it is not possible to give approved control measures, it is recommended by Mr. Fish that the following programme be adopted, which should considerably alleviate the trouble:

1. Prune out all twigs to which dried diseased fruit are attached, and burn.

2. Prune out carefully any dead twigs and burn.

3. After pruning, it is suggested that the following spray schedule should be tried:—(a) Spray with Bordeaux 12-5-80 plus 1½ gallons of a winter white oil. (b) Repeat the above spray about August 1, before the buds break.

The foregoing will apply to Apricots as well as Peaches.

On the subject of brown rot (*Sclerotinia cineria*), the following extracts from G. H. Cunningham's book, "Fungi Diseases of Fruit Trees" (New Zealand), will be found helpful:

Control measures consist of the removal of the sources of infection, supplemented by spray treatment, as under:—(1) Cutting out of infected shoots and cankers on the branches; (2) destruction of mummies hanging on the trees of lying on the ground; (3) prevention of contamination of fruit during handling and marketing; (4) spray treatment.

As is well known, brown rot is the most difficult of orchard diseases to combat, and it must be admitted that by spraying alone the disease will not entirely be held in check.

## FRUIT TREES

### ONE GROWER SAYS—

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### Spray Schedule.

No.	Time of Application.	Spray to Use.
1.	Bud movement . . . . .	a. Bordeaux, 5-4-50, or b. Lime-sulphur, 1-15.
2.	Early pink . . . . .	Lime-sulphur, 1-50.
3.	Petal fall . . . . .	a. Lime-sulphur, 1-120, or b. Self-boiled lime-sulphur, 8-8-50.
4.	One month after petal fall . . . . .	a. Lime-sulphur, 1-120. b. Self-boiled lime-sulphur, 8-8-50, or c. Precipitated sulphur, 8-100.
5.	Seven weeks after petal fall . . . . .	a. Lime-sulphur, 1-120. b. Self-boiled lime-sulphur, 8-8-50, or c. Precipitated sulphur, 8-100.
6.	Shortly before the fruits reach maturity . . . . .	a. Lime-sulphur, 1-120. b. Self-boiled lime-sulphur, 8-8-50, or c. Precipitated sulphur, 8-100.
7.	After the fruits have been picked . . . . .	a. Self-boiled lime-sulphur, 8-8-50, or b. Precipitated sulphur, 8-100.

No. 1 application is necessary for the control of the bladder-plum, brown rot, leaf-curl, and leaf-rust. Nos. 4 and 5 are necessary for the control of die-back; Nos. 4, 5, 6 for the control of Peach-scab. With the latter disease, on Nectarines, it is necessary to spray a fortnight after petal fall. No. 7 is required only when leaf-rust is troublesome.

When brown-rot is absent from a district, Nos. 2 and 3

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applications may be omitted; where brown rot is a serious factor, more satisfactory results will be obtained from the use of self-boiled lime-sulphur; in fact, this has proved a more efficient spray than lime-sulphur for brown-rot, die-back and Peach-scab. Precipitated sulphur also is a more efficient controllant of brown-rot than lime-sulphur, 1-120.

Precipitated sulphur ("atomic sulphur"; "sulphur atoms").—The success in the use of this substance depends largely on the degree of fineness attained in its manufacture. To obtain sulphur in such a fine state of division necessitates its preparation by chemical precipitation, a process which is somewhat costly, hence the reason for the high price of such preparations.

**Self-boiled Lime-sulphur.**—This is quite an efficient spray for the control of brown-rot, Peach-scab and leaf-rust, and has little, if any, scorching effect upon the foliage. The formula recommended is:—Quick lime 8 lb., sulphur 8 lb., water 50 gals.

The lime used should be of good quality, and the sulphur free from all lumps. Place the lime in a wooden tub, and add one or two gallons of water, preferably hot water, as then the risk of "drowning" the lime is lessened. When slaking becomes vigorous add the sulphur, and stir constantly, adding more water as required to form a thick paste. When slaking ceases, cool the solution by adding three or four gallons of cold water, being careful to do this before any reddish color appears. The mixture may then be poured through a strainer into the remainder of the water in the spray tank, and the agitator kept going during this operation.

No heating is required for the preparation of this compound, the heat generated during the slaking of the lime being all that is required. One defect of this spray is that it settles rapidly, so constant agitation is necessary; but this is not a serious defect with the modern power plant. Arsenate of lead may be safely added to this solution.

\* \* \* \* \*

Commercial lime-sulphur is obtainable made from standard manufacturers. Such should be diluted according to baume readings.

#### EXPORTS OF AUSTRALIAN APPLES AND PEARS.

Over 5,000,000 Cases Apples and Pears to mid-May.

The following figures give the number of cases of Apples and Pears exported from the various States to overseas markets up to the respective dates:—

N.S. Wales to May 13, 307,988 Apples; 46,139 Pears. Victoria to May 12, 1,323,782 Apples; 356,933 Pears. Queensland to May 13, 18,376 Apples, 117 Pears. S. Australia to May 13, 231,001 Apples, 14,583 Pears. W.A. to May 8, 429,003 Apples, 45,577 Pears. Tasmania to May 13, 2,220,833 Apples, 174,867 Pears. Total cases of Apples shipped were 4,530,983 and Pears 637,717.

#### CALIFORNIAN CREAM MELON.

The Californian Cream Melon was sold in Melbourne for the first time this season. Mr. G. B. Minns, Superintendent of Markets, stated recently that this is by far the most delicious Melon produced. 400 tons of Melons of various varieties are sent by rail or road to the Victoria Market each year from the northern districts.

[We endorse Mr. Minns' remarks regarding the high quality of the Californian Cream Melon.—Ed., "F.W."]

**FRUIT TREES**

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Also all kinds Almonds, Apricots, Cherries, Nectaries, Peaches, Pears, Plums (English and Japanese), Prunes, Quinces, Walnuts, and all other varieties, including Persimmons, Passion Fruit, Grape Vines, Currants, Gooseberries, Raspberries, Strawberries, Rhubarb, Mulberries, and miscellaneous Fruits, Chestnuts, Filberts, Lemons, Oranges, etc.

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**FRUIT TREE PLANTING.**

Interesting Review by C. J. Goodman's Nurseries,  
Bairnsdale, Vic.

**T**HE PLANTING OF FRUIT TREES forms the subject of the following interesting notes from Mr. G. W. Peart, proprietor C. J. Goodman's Nurseries, Bairnsdale, Vic., thus—

In common with our fellow fruit tree nurserymen throughout the State, the month of May opens for us with that feeling more or less of waiting and hoping. Ere the 1st of June comes round, may one and all be "hard at it," i.e., selling and lifting fruit trees.

Certainly a good many trees have already been booked, but the majority of fruit growers and new planters prefer to wait and see how such and such varieties have just been selling. Even so, we can say thus early in the season, that trees of Clingstone Peaches, export Pears and leading Apricots are just about sold out.

Several kinds in Apples, Cherries, Nectarines, Dessert Peaches, Plums, English and Japanese, are well in demand. It is very noticeable this season that the bulk of orders is being concentrated on proved standard kinds, a fact which in our opinion will ultimately be to everybody's advantage. Costs of production must be kept down, and the standardising of varieties is a considerable help in this same direction. Why growers have in the past planted in most instances so much varieties, is apparently strange to us nowadays, but the complete change in marketing conditions, etc., in recent years, explains a good deal—to say nothing of the "highly colored" descriptions one used to read in most catalogues—yes, ours is included.

Growers in Australia have enjoyed a bountiful crop, but with the exception of canning fruits, prices realised in our home markets have been comparatively low. Now fresh fruit exporters are trusting that Apples and Pears sent overseas will make a decent average return. Low prices of primary produce, industrial unemployment, and a more or less generally dry time all over the continent, will combine to act as a deterrent to any boom planting.

Still, now is the time for men of vision to step in and plant. Good fruit land, efficient labor and prime fruit trees are all obtainable at most reasonable rates. When 1933 plantings come into full bearing, present difficulties will be well behind us all.

At our own nurseries, supplies of all leading kinds of Apples such as Granny Smith, Dunn's, Jonathan, Cleopatra, Democrat, Statesman, etc., etc., are still obtainable. Other varieties of fruit trees are to be had in both quantity and quality. We are now quite ready to begin

our winter season's programme of lifting, packing and despatching to all parts, both inside and outside the Commonwealth.

**REMOVAL OF SPRAY RESIDUE.****Fruit Washed in Hydrochloric Acid by Victorian Growers.**

The washing of Apples for export in a bath of diluted hydrochloric acid to remove spray has been successfully accomplished this season by Mr. J. W. Bailey, Narre Warren, Mr. J. J. Ahern, Pakenham, and other growers.

A trough or vat was constructed 6 ft. long x 2 ft. deep, containing hydrochloric acid. The Apples in a specially constructed container were dipped in the solution, then rinsed in running water. The fruit was then dipped in a third trough containing  $\frac{1}{2}$  lb. lime to 16 gallons of water to neutralise any trace of acid left on the fruit and to protect the hands of the persons washing the fruit.

**TOMATO CULTURE.**

**T**OMATO CULTURE was dealt with at the Laura Bay Branch of the S.A. Bureau of Agriculture recently by Mr. F. Sims, who in the course of his paper gave the following hints:—

Plant the seed during June in boxes, and have a covering that can easily be placed over them at night as a safeguard against frost. A good cover can be made with two old bags cut open and sewn together to form a sheet. When the plants are about 2 in. high, transplant them into another box to harden, and to give them more room. Finally, transplant into the open into ground which has been previously dug with not too much manure. When the plants are showing the first flower buds, and as the weather gets warmer place a good mulch of stable manure on top of the ground around the plants to stop evaporation during summer. Keep the soil damp until the first fruit sets, then water at least twice a week, always keeping the ground well hoed and loose. Spotted wilt is the most serious disease for out-door Tomatoes, and causes heavy losses in the season. Indications of the disease are that the young leaves turn a bronze color and the plant has the appearance of not having enough water. Wilt will attack the plants from seedlings through all stages, but disappears as the weather becomes hot. There is no effective cure for this disease, but a spraying of nicotine and soap at intervals of 10 days, or dusting with nicotine dust or sulphur will sometimes check it from spreading.—"S.A. Journal of Agriculture."

## Fruit Trees of Outstanding Quality

True to name, healthy and well-rooted. Citrus trees in large quantity—  
Budding Wood supplied by the Bud Selection Society of N.S.W.—  
Worked on Lemon, Sweet Orange, and Trifoliata Stock.

CATALOGUE FREE ON APPLICATION.

ESTABLISHED 1901.

**L. P. ROSEN & SON, Fernhill Nurseries**  
Pennant Hills Road, CARLINGFORD, New South Wales

## TASMANIAN "PLAIN" GRADE APPLES.

Not Permitted in Interstate Trade.

The Huon Municipal Association recently requested the Tasmanian Fruit Board to reconsider the decision to prohibit the export of "plain" grade Apples to interstate markets. During the discussion which took place, Mr. B. J. Pearsall (Chairman of the Board) said grading regulations were reviewed for each season, and the State Fruit Board had nothing to do with any alteration or amendment.

The Standardisation Board had decided to eliminate this grade from interstate markets for the present season. Mr. A. Dickson moved: "That this Board is in favor of the elimination of 'plain' grade fruit from interstate export for the present." Mr. J. H. Astell said that the Standardisation Board had spent three hours on this question, and its decision was made in the interests of the industry, and he was sorry that the Board could not eliminate "plain" grade fruit from overseas export. He would prefer that to interstate prohibition. Tasmania must concentrate on its best, or lose markets. He seconded the motion. Mr. W. H. Calvert, M.L.C., said that the action of the Standardisation Board for this and other reasons was the best in the interests of the industry. Mr. M. Calvert said that last year he obtained up to 13/- a case for "plain" grade fruit on the Mainland. The Board took a big thing on itself when it disregarded the recommendations of more than one fruit-growers' conference. All sections of the industry had to be considered. The large grower could afford to throw away a thousand cases, but the small grower with no market for "plain" grade would be forced off the land and soon be on the dole. Mr. J. P. Piggott thought that regulations should be made to fit the fruit grown and not the fruit grown to fit the regulations. Mr. P. H. Thomas (Chief Horticulturist) said that this year there would be a market for only first-class fruit.

\* \* \* \* \*

Later, Mr. Dickson secured permission to alter his resolution to apply to Apples only. Mr. W. H. Calvert, M.L.C., then stated he was prepared to allow "plain" grade Pears to go to the Mainland, and Mr. H. A. Court moved as an amendment: "That it be a recommendation to the Standardisation Board to rescind the regulation eliminating "plain" grade from export to the interstate markets and to substitute a regulation limiting the amount of the blemish to a quarter of an inch." This was seconded by Mr. Morrisby, and the amendment was agreed to.

In view of the trend of the discussion which favored the lifting of the restriction as soon as a payable market was available, the Standardisation Board will probably review the position shortly and allow suitable Apples of "plain" grade to be exported by August 1. Mr. M. Calvert moved "That the Minister of Agriculture be recommended to introduce legislation providing that in future the State Fruit Board be the Standardisation Board, with the addition of the Director of Agriculture and the Chief Horticulturist."

The consumption of nitrogenous fertilisers in Spain has increased from 30,000 tons in 1922 to probably 100,000 tons last year.

## UNREFRIGERATED FRUIT CARGO.

Apples Arrive in Ripe Condition.

"Mixed" Reception by the Trade.

**S**HIPMENTS OF APPLES under unrefrigerated conditions were sent to Europe this season.

So far only brief cable messages have been received, and detailed advices by mail will be awaited with great interest.

Meantime Messrs. Clements and Marshall Pty. Ltd., of Devonport, Tasmania, advise as follows:

"**Djambi.**"—Of course we have no reports by mail concerning the condition of deliveries ex this vessel, nor the two following steamers, but our receivers in Rotterdam reported the cargo as fully ripe. Prices realised in Australian currency were:—Dunns 11/-, Cleos. 10/2, Jonathans 6/6.

"**Tarakan.**"—This steamer was reported by cable to have landed her fruit in good condition, but ripe. The prices in Australian currency realised in Rotterdam were:—Cleos. 12/2, Dunns 10/10½, Jons. 10/4, Sturmers 9/7½.

"**Thermopylae.**"—The comment of receivers in Rotterdam regarding the cargo ex this vessel was "dead ripe." We give you herewith prices realised, and you will of course appreciate that such varieties as Five Crowns and French Crabs would never bring satisfactory prices on the markets in Holland, even in times of scarcity:—Cleos. 10/7½, Dunns 8/11½, Jons. 7/6, STP. 7/8, SPM. 6/10½, Dukes 5/10½, FCP. 5/3½, G.F. 6/4, Tasmans 7/5, P.M. 6/4, F.C. 7/5, various 6/0½.

The two outstanding varieties which are wanted are Cleos. and Dunns, and from all three vessels, we submit that realised prices are reasonably satisfactory.



The Most Extensive  
Manufacturers in the  
British Empire of

## RUBBER STAMPS

Stencils, Marking Devices,  
Inks & Acme Stamp Pads

We make a Big Range of Special  
Fruit Case Marking Sets

No. 9 Spraying Machine

We also Manufacture and Supply  
**Spraying Machines**  
for All Purposes

Let us know your requirements, and we will  
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## Excelsior Supply Co. Ltd.

160 George St. West 278 Post Office Place  
SYDNEY, N.S.W. MELBOURNE, VIC.  
86 Manners St., WELLINGTON, N.Z.

## AUSTRALIAN FRUIT EXPORTS.

# Sulphate of Ammonia

*Applied Prior to Blossoming*

— is the —

## KEY TO SUCCESS IN FRUIT GROWING

### Don't Miss the Advantages it Offers

*Recommended application for General Use:*

2½ lbs. SULPHATE OF AMMONIA per tree.

2½ lbs. SUPER per tree.

¾ - 1½ lbs. SULPHATE OF POTASH per tree.

All contained in 6 lbs. of

### THE 4 : 4 : 1 MIXTURE

(For the higher quantity of Potash,  
choose the 2 : 2 : 1 Mixture)

If Potash is not desired, use

### SUPER and AMMONIA 1 : 1

Any of these Mixtures are supplied by all Manure Companies or their Agents.

*Literature and Advice from*

## Nitrogen Fertilisers

Proprietary Limited

360 COLLINS STREET, MELBOURNE, C.1.

Hamburg, May 8.—There was a good demand for the "Leuna's" shipment of Apples. W.A. Cleos, 10/- to 14/-; Dunns, 8/9 to 12/9; Jons, 7/3 to 14/-; Vic. Cleos., 10/3 to 12/9; Dunns, 9/6 to 12/9; Jons, 8/6 to 13/-. N.S.W. Cleos., 12/-; Dunns, 10/- to 11/4; G.S., 11/4 to 12/-. Jons, 10/9. Pears: W.A. Jos., 15/6 to 16/3; Bosc, 12/9 to 16/3; Keiffer, 10/3 to 11/6; Vicar, 9/6 to 11/-.

Ph. Astheimer & Sohn, Hamburg, in a letter dated April 20, report that Apples from W.A., Vic. and N.S.W., ex "Isar," were fairly satisfactory in quality and condition. W.A. Apples more advanced realised 1/- more than Victorian. S.A. Apples, ex "Djambi" shipped in experimental common stowage, variable, Cleos. and Dunns condition fair, fruit ripe (some overripe) necessitating rapid disposal. Jons. wasty, prices low. No encouragement is offered for shipments in common stowage. Pears: Anjous, B. Hardy, Bosc, Packhams, generally fair, while Vicars and Gansells more or less in bad condition. The fruit, which was green and hard was spotted and difficult to sell. W.B.C. over-ripe, some wasty. Anjous sold at 9/- to 11/-; Bosc, 8/6 to 10/-; B. Hardy, B. Diel, 8/3 to 9/-; Vicar, 5/6 to 7/-.

Hamburg, April 11.—Messrs. Timm & Gerstenkorn report sale of 5,700 packages of Victoria Pears ex "Isar," mainly Boscs, Howell, Packham (small quantities): few Anjous, Gansell, Vicar, W.B.C. Fruit generally sound, W.B.C. slightly wasty. Demand mostly for Bosc and Anjou, smaller enquiries for Packham, buyers not interested in Howells, Gansells, Vicars or Williams; 1,600 packages were withdrawn from sale. Prices:—B.B., 8/3 to 10/-; Anjou, 9/9 to 11/3; Packhams, 6/- to 8/6; others lower.

London, May 22—Ex "Port Hardy," N.Z. Dunns, 8/9 to 10/6; Jons. and Cleos., 10/6; ex "Ceramic" and "Port Campbell"—Vic., Jons., 8/- to 9/6; London, 9/- to 9/9; Dunns, 9/- to 10/-; Cleos., 9/6 to 11/9. Ex "Port Bowen"—Tas. Cox's, 10/- to 15/6; Cleos., 9/- to 11/-; Alf., 8/- to 11/3. "City of Winchester"—Pears, Vic. P.T., 9/- to 11/3; B.B., 7/- to 14/3; Jons., 11/9 to 14/6; W.N., 10/- to 12/-. "Ceramic"—Tas. B.B., 7/- to 10/6; Comice, 12/- to 15/3; W.

(Continued on p. 340.)

# CARRIAGE OF FRUIT BY SEA

## To Interstate Markets

**FRUIT SHIPMENTS FOR SYDNEY AND QUEENSLAND PORTS SPECIALLY CATERED FOR**

**REFRIGERATED AND ORDINARY CARGO SPACE AVAILABLE.**

Regular weekly service of Fast, Modern, Passenger Steamers, fitted with ventilated 'tween decks and Refrigerator Chambers.

By special arrangement Fruit, etc., for Sydney, leaving Melbourne Noon Saturdays, is delivered on Sydney Wharf 6 a.m. Mondays, ready for early morning market.

Fruit for Brisbane, leaving Melbourne Noon Saturdays, delivered Brisbane Wharf 8 a.m. Thursdays.

### SPECIAL REDUCED RATES OF FREIGHT.

For further particulars and sailing dates, apply to:—

**AUSTRALIAN STEAMSHIPS PTY. LTD.**

Howard Smith Ltd., Managing Agents, 35 Market Street, Melbourne, C.I. Tel., Cent. 8314.

**AUSTRALASIAN UNITED STEAM NAVIGATION CO. LTD.**

MacDonald, Hamilton and Co., Managing Agents, 467 Collins Street, Melbourne, C.I. Tel., Cent. 9708.

**ADELAIDE STEAMSHIP CO. LTD.**

505 Collins Street, Melbourne, C.I. Tel., Cent. 475.

**HUDDART PARKER LTD.**

466 Collins Street, Melbourne, C.I. Tel., Cent. 8960.

**MCILWRAITH McEACHARN LTD.**

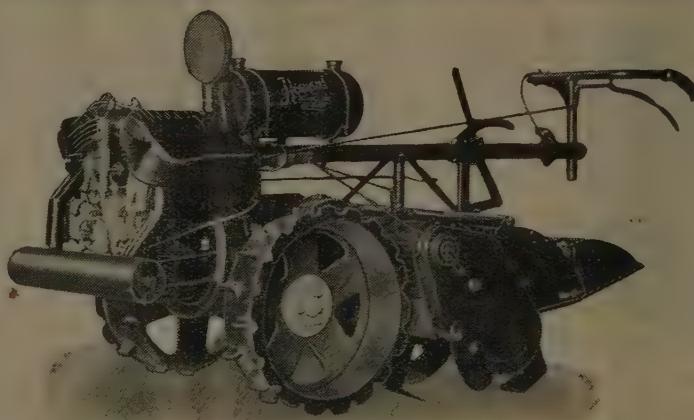
94 William Street, Melbourne, C.I. Tel., Cent. 9440.

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**Maximum Results at a Minimum Cost by using  
THE HOWARD ROTARY HOE**



**HOWARD ROTARY HOE "EIGHT,"** the ideal machine for Orchard Cultivation. Cuts 3ft. wide and up to 9 inches deep. May be equipped with Power Spray, fertiliser distributor, furrowing attachment, saw-bench, and many other useful attachments.

Models of the Howard Rotary Hoes are supplied for all classes of work.

For further particulars ring or write the Manufacturers—

**Austral Auto-Cultivators Ltd.**  
NORTHMEAD SYDNEY Phone UW 8984

### Australian Fruit Exports.

(Continued from p. 339.)

Cole, 7/9 to 10/-. "Port Bowen"—N.S.W. B.B., 9/- to 13/3; P.T., 10/- to 13/-.

London, May 24.—"Zealandic"—Vic., Jons., 7/- to 9/6; Dunns, 9/- to 9/9; Yates, 10/-. Ex "City of Winchester"—N.S.W. G.S., 13/- to 15/-; Cleos, 9/- to 10/-. Ex "Mooltan," W.A. Jons., 9/3 to 10/3; R.B., 8/9 to 9/6; S.A. Cleos., 9/-; R.B., 8/6 to 9/-.

Manchester, May 24.—Ex "Tekoa"—N.Z. Jons., 9/- to 10/6; D.S., 9/3 to 10/3; Del., 8/6 to 10/9; Ballarat, 10/6 to 11/3; Londons, 8/- to 9/3.

Mr. H. Dakin, Sydney, Australian agent for George Monro Ltd. reported on May 8, cable from Monro's—"Esperance Bay," "Barrabool" fruit good condition, Apple market easier. Tas. Ribs. and Cleos., 8/6 to 10/-; Alf and Wore., 10/- to 11/-. Cox's (bitter pit), 8/- to 14/-. Queensland, N.S.W. and Vic. Jons. and King David's, 10/- to 11/6; Londons, 9/6 to 10/-; G.S., 11/- to 15/-; Cleos., 10/- to 11/-. Hull and Glasgow prices, 1/- and 2/- lower than London. Pear trade very slow.

## Poultry Notes.

### MIXING MASHES.

"C.B." (Launceston) writes:

**Ques. 1.**—Could you give me a suitable growing mash for Rhode Island Reds, using bullock's livers and sheep's heads, also an evening ration.

**Ans. 1.**—A suitable wet mash for growing stock could be made up in proportion as follows:—Bran 30 lbs., wheat pollard 50, oat pollard or maize meal 10, bone meal 4. Mix the mash with soup from the cooked meat, such as bullock's liver, and in addition, give approximately 2 ozs. of the cooked meat per bird per week. Add to the mash approximately 20 per cent. of chaffed green-feed.

**Ques. 2.**—What alterations would I need to make to change it to a laying mash?

**Ans. 2.**—This mash would be quite suitable as a laying mash with the exception that the bone-meal may be eliminated.

**Ques. 3.**—Would the mash used for the Rhode Island Reds be suitable for White Leghorns, if not, what alterations would I need to make?

**Ans. 3.**—A mash used would be equally suitable for any breed, though in the case of a heavy breed the quantity fed might need to be reduced slightly in the case of second-year stock, if they are observed to be putting on too much fat. It is a good plan to catch and weigh a few birds occasionally. Have in mind the standard weights for the various breeds. Never underfeed layers.

#### Chick Rearing Costs.

**Ques. 4.**—What would it cost to rear 25 chickens until they begin to lay?

**Ans. 4.**—It is difficult to give an exact answer without knowing conditions or prices of feed stuffs in your locality, but as an estimate the feed costs of rearing chickens from hatching until maturity would range from 2/- to 2/6. There would also be the brooder cost, but this would be slight in the case of a large number.

## GROWERS!

Orchardists, Market Gardeners and Flower Growers. We have MONEY TO LEND in various sums up to £200, on Furniture, Pianos, Players, Motor Cars, Trucks, Plant, Machinery, Implements, or any available security. On Promissory Notes without publicity. Lowest rates. Easy terms. Monthly instalments. Minimum charges—No commission. Forward us FULLEST particulars (enc. stamp) or call and we will gladly quote you.

THE MANAGER .

SPECIALTY INVESTMENTS (Old Estab.),

89 Collins Street,

Melb., C.1.

**Empire Fruit in London.**—The s.s. "Port Huon," which arrived in King George V. Dock on April 25, with 100,000 packages of Apples was the seventeenth vessel to arrive in London from Australia, New Zealand and Tasmania, with new season's fruit, totalling nearly three-quarters of a million packages.

During June, the full moon comes in on Thursday, 8th.

# Melbourne "Royal" Show

21st to 30th September, 1933

**FRUITGROWERS:**—Exhibit your Produce at this Show:—The finest advertising medium in Victoria for the Fruit Industry.

Liberal Prize Money offered for all varieties of Fruit

ENTRIES CLOSE SATURDAY, 19th AUGUST

Write for Prize List

**LOUIS MONOD, Secretary, R.A.S. of Victoria**  
422 Collins Street, Melbourne

# Australian and New Zealand Fruit Trade

## Market Notes and News — Prices, etc.

### REPRESENTATIVE FIRMS, FRUIT MERCHANTS, AGENTS, EXPORTERS.

Advertising in this Journal.  
NEW SOUTH WALES.

### Sydney: CITY FRUIT MARKETS.

Associated Growers' Selling Agency Ltd.  
Black, H., & Son.  
Chilton, F.  
Fruiterers' Supply Company.  
Griffiths Fruit Supply Ltd.  
Greentree, H. J.  
Hop Lee & Co. Ltd.  
Kennett, F. C.  
Lockart, H. C.

Moss, J., & Sons.  
Musgrave, W., & Son.  
McEnally, R.  
Rogers, F. H. G.  
Slater, Jas.  
Schuster, A. E.  
Smith, L.  
Stubbs, J.  
Sunnyside Orchards Ltd.  
Ward & Felton.  
Young, Frank.

### VICTORIA.

Bell, Benson Pty. Ltd., Wholesale Fruit Market.  
Cave, F., & Co. Pty. Ltd., Wholesale Fruit Market.  
Davis, J., Pty. Ltd., Wholesale Fruit Market.  
Frankel, H. & S., Wholesale Fruit Market.  
Lister, G., Pty. Ltd., Wholesale Fruit Market.  
Millis, A., & Sons, Wholesale Fruit Market.  
McLean, N. N., Pty. Ltd.  
Mumford, J. G., Wholesale Fruit Market.  
Pang & Co. Ltd., H. Louey, Wholesale Fruit Market.  
Patrileos, P. A., Wholesale Fruit Market.  
Pitt, A. E.  
Producers' Dist. Society, Wholesale Fruit Market.  
Ross, J. W., Wholesale Fruit Market.  
Sang Goon & Co., Wholesale Fruit Market.  
Silbert, Sharp & Davies, Wholesale Fruit Market.  
Stott & Sons, T., Wholesale Fruit Market.  
Tim Young & Co. Pty. Ltd., Wholesale Fruit Market.  
Tong, W. S., Wholesale Fruit Market.  
Vear, F. W., Pty. Ltd.  
Wade, H. M., & Co., Wholesale Fruit Market.  
Wilson, H., Pty. Ltd., Wholesale Fruit Market.  
Wing, R. A., & Co., Wholesale Fruit Market.  
Wing, Young & Co., Wholesale Fruit Market.  
Woollf, G., Wholesale Fruit Market.  
Wholesale Fruit Merchants' Assn., J. D. Fraser, Temple Court, 428 Collins Street, Melbourne.  
Young, J. H., & Co. Pty., Wholesale Fruit Market.

### BRISBANE: QUEENSLAND.

Barr, A. S., Fruit Exchange.  
Cooksley & Co., Fruit Exchange.  
Geeves, H. V., Fruit Exchange.  
Robsons Ltd., Fruit Exchange.  
Winters, E.

### TASMANIA.

Eric Burgess Pty. Ltd., 88 Collins Street, Hobart.  
E. R. Cottier Pty. Ltd., Temple Place, Macquarie Street.  
Jones, H. Co. Ltd., Fruit Exporters.  
Peacock, W. D., & Co., Fruit Exporters, and at London.  
Launceston:  
Bender & Co. Pty. Ltd., 100 Elizabeth Street.

### DUNEDIN: NEW ZEALAND.

Co-operative Fruitgrowers of Otago Ltd.

### GREAT BRITAIN.

Hull:  
London and North-Eastern Railway, 7 Bridge-street, Sydney, N.S.W.  
London:  
Lewis, E. H., & Son Ltd., Covent Garden, London.  
Margeson & Co. Ltd., Covent Garden, London.  
Monro, Geo., Ltd., Covent Garden.  
Pask, Cornish & Smart, London.  
Port of London (Capt. A. W. Pearse, 10 Bligh St., Sydney).  
Foupart, T., Ltd., Covent Garden.  
Ridley, Houlding & Co., Covent Garden.  
White & Son Ltd., London Fruit Exchange, Spitalfields, E. 1.

Manchester:  
The Port of Manchester Rep., W. J. Wade, 8 Bridge Street, Sydney.

### BREMEN: GERMANY.

Fruchthandel, Gesellschaft.  
Hamburg:  
Astheimer, P. H., & Son, Fruchthof Gustav Bey, Hamburg.  
Int. Fruit Import Gesellschaft.  
Lutten, J. H., & Sohn, Hamburg.  
Stier, Aug., Fruchthof.  
Timm & Gerstenkorn.

The embargo on our fruits by New Zealand undoubtedly affected values of Pineapples, Grapes, Passions and all citrus fruits, and unless this market is again available in the very near future, the prospects of Mandarins realising payable figures are far from hopeful, while Oranges will also be affected to a greater extent than at present.

Apples.—Ample supplies were available, and while there was a fair demand for the larger sizes of all good red Apples, smaller fruit and off-types could only be moved at low rates. Demand was quiet for cookers, but there

### THE SYDNEY MARKET IN MAY.

**T**RADING DURING MAY was extremely quiet, enquiry for practically all varieties of fruit being much below normal for this period of the year. It is usual for a falling off in demand to be experienced after Easter, but not to the extent that prevailed this year.

The weather on the whole was good, and the reason for the smaller demand must be looked for elsewhere and will probably be found in the existing economic conditions.

F. CHILTON

ESTABLISHED 1894

FRUIT COMMISSION AGENT

Licensed under Farm Produce Agents Act

Highest Market Prices

Prompt Returns

Reliable Advice

Registered Address for Telegrams and Cables,  
"CHILTONS"

References:—Bank of N.S.W., Haymarket, Sydney  
and Growers throughout Australia

CITY FRUIT MARKETS, SYDNEY

was little alteration in values during the period. Local Granny Smiths improved a little in the early part of the month, when shippers were active, but a falling off in demand was noticeable during the past 10 days, and values were inclined to ease. Enquiry is expected to improve next month and values may move up again. Consignments from Tasmania were not as heavy as anticipated, and it is reported that growers in that State were holding back supplies, hoping for an improvement in the market.

Export to the U.K. was continued and without the relief from the heavy shipments made this season, values would have been even lower.

Bananas were in light supply throughout the month and sold at good values under present conditions. Demand was only fair, and prices could not have been held up, had supplies not been short. Only very small consignments of Fiji Bananas arrived, and these did not affect values one way or the other. The quality of Fijis in the later shipments was inferior to the earlier consignments, and buyers showed a preference for the local article.

Grapes.—While supplies were fairly heavy, demand was very slack right throughout the month for all varieties, and returns to growers would in most cases be unpayable. The absence of buyers operating for the New Zealand market was felt.

An appreciable quantity of Ohanez packed in cork dust was exported, mainly to the East.

Grapefruit.—Supplies were available, and there was a fair demand for choice fruit at from 8/- to 10/- per case, with special lines at 12/-.

Lemons.—Values showed little alteration, poorly colored fruit ranging from 5/- to 8/-, with colored Lemons to 10/-, and a few special to 12/-. Supplies were only fair with a limited demand. With the high prices ruling in New Zealand, had this market been available, values would have been at least 2/- per case better.

Mandarins.—Consignments which were negligible in the early part of the month, increased each week. The bulk of the early arrivals were Imperials, and these sold at 3/- to 4/6 per box. Emperors appeared about the first week in May and opened at 8/- per case, but prices have since come back to 5/- to 7/-. Shippers operated, buying for the Melbourne market, but enquiry from shopkeepers was poor.

Oranges.—Arrivals of Navels and Silettas increased daily, while small quantities of main crop Valencias were also on the market. Buyers from Melbourne helped to hold values, and without this avenue prices must have been lower, especially for Navels. Prices for Navels at the end of the month were 4/- to 6/-, with a few at 7/-, 2/- per case lower than at the end of April. Silettas were increasingly difficult to sell, and even at prices of 2/6 to 4/-, stocks are mounting up.

With little prospect of the New Zealand market being available, the outlook for the winter months is far from pleasant, and any growers with fruit fit for export to the U.K. would be well advised to consider shipping a portion of their crop. Two boats have been booked to load Oranges. The Otranto leaving Sydney on 24/6/33 for London, and the Orestes sailing on 12/7/33 for Liverpool and/or Glasgow.

Applications have also been made for steamers to load Valencias, one about the last week in August and one about the last week in September.

**Passion Fruit.**—Supplies have been only fair, but with a limited enquiry values show little alteration. Choice fruit is selling at 7/- to 10/-, with a few special to 12/- per box.

**Papaws.**—Light supplies were available, and sold at 12/- to 15/- per tropical case.

**Pears.**—While supplies of small Pears were heavy, there was a shortage of larger sizes, agents having to draw on cold store stocks. Winter Coles and Packhams were firm at 10/- with a few to 11/- for the larger sizes, while small fruit sold at 4/- to 7/-. Enquiry for Nelis, Bosc, and Howells was not good, and these varieties sold at 4/- to 6/-. Josephines were worth 4/- to 10/-, according to size.

**Pineapples.**—Supplies were very light throughout the period, and best sizes sold at good values, 18's—21's realising 13/- to 16/-, and larger and smaller sizes 8/- to 12/-. —P. S. Macdermott.

#### New South Wales.

**Sydney (29/5/33).**—The Market Representative of the Fruitgrowers' Federation of N.S.W. reports prices as follows:—Apples: Cleo. (N.S.W.), 8/- to 5/6; Demo. (N.S.W.), 4/- to 7/-; Del. (N.S.W., Tas. and Vic.), 5/- to 11/-, few 13/-; Dukes (Tas.), 3/- to 5/-; French Crab (Tas.), 4/- to 7/-; G. Smith (N.S.W.), 5/- to 9/-; Geeveston Fanny (Tas.), 3/6 to 6/-; Jon. (N.S.W., Vic., and Tas.), 5/- to 10/-; King David (Vic. and N.S.W.), 4/- to 6/-; L. Pippin (N.S.W. and Tas.), 3/- to 5/6; R. Beauty (N.S.W.), 3/- to 8/-; Stayman (N.S.W.), 4/- to 7/-; Sturmer Pippin (N.S.W. and Tas.), 3/- to 4/6. Pears: B. Bosc (Vic and Tas.), 4/- to 7/-; Howell (Vic.), 4/- to 6/-; Keiffer (Tas.), 4/- to 6/-; Madam Cole (Tas., Vic., N.S.W.), 4/- to 6/-; Packham's T. (N.S.W.), 5/- to 11/-; W. Cole (N.S.W. and Tas.), 4/- to 11/-; Josephine (Vic.), 4/- to 10/-; W. Nelis (N.S.W.), 4/- to 8/-. Bananas: (Qld. and N.S.W.), 15/- to 26/-, few higher; Custard Apples (Qld.), 4/- to 5/- half case. Lemons: Green, 4/- to 6/-; N.S.W., partly colored, 4/- to 8/-. N.S.W., colored, 6/- to 8/-, few higher. Grapefruit: N.S.W., 6/- to 9/-; special Marsh's Seedless, 7/- to 10/-; White Siletta, 2/- to 3/-. Mandarins: Thorny, 8/- to 4/- half; Emperor, 3/- to 5/- bushel; Parker and Imperial, 2/- to 3/-. Navels: N.S.W., local, 4/- to 6/-; others, 5/- to 7/-. Navels from local sources are now coming forward freely and are about normal for this period of the year. Inland Navels, largely Thompsons, are increasing and will probably attain fair proportions by the week-end. The fruit is on the large side. The demand for Navels is not yet good, but there are indications of a growing public interest in these. Grapes: N.S.W., Purple Cornichon, 4/- to 5/-, few 5/6; N.S.W. Ohanez, 3/- to 4/- half. Guavas (N.S.W.), 2/- to 3/6 half; Papaws (Qld.), 10/- to 15/-; Pineapples (Qld.), 6/- to 16/-, few higher; Passion Fruit, N.S.W., 6/- to 8/- few extra; N.S.W. inferior, 4/- to 5/-, special 10/-; Vic., 11/- to 15/- bushel; Quinces, N.S.W., Vic., and S.A., 4/- to 6/-, special 7/-.

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Highest Market Prices, Prompt Returns, Reliable  
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For Satisfactory Results, Send Your Fruit to

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Prices, Consign Your Fruit to**Hop Lee & Co. Ltd.**Licensed Farm Produce Agents,  
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Phone M 3228.Regular consignments of  
fruit well packed and  
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Fruit and Vegetable Commission Agents.

Also Contractors to Suburban and Country Chain Stores.

We Solicit portion of your Consignments.

Prompt Returns Immediately on Completion of Sales.

Well established business in an advantageous position  
in the Market.

## SYDNEY MARKETS.

**Sydney, 6/5/33.**—A general clean-up of the City Markets is being advocated by the daily press of Sydney, and this has been followed by litigation between the police and the City Council on the question of rights to Hay-street.

The dispute arose out of the serving of summons on stall-holders for obstructing traffic. These men have been allowed by the Council to sell produce in Hay-street when there is no accommodation available in the market proper.

The police claim that these stall-holders are obstructing a public thoroughfare, and are prosecuting accordingly. The City Solicitor claims that Hay-street is part of the markets, and not specifically used for the conduct of traffic.

The police won the first test when three stall-holders were fined for obstructing traffic in Hay-street. The City Solicitor has appealed against the decision.

There was a falling off in the demand for Apples during April and May, but prices for Pears remained unaltered. There was a steady demand for Packham's and Winter Cole. Lemons are in good demand, but there is not sufficient choice fruit to supply it. Most of the Lemons available are plain and blemished grades. Second crops of Late Valencias are still arriving and are meeting competition with new season Navels and Siletas. New season fruit is on the increase and prices are easing.

Grapes from the Murrumbidgee irrigation area and Orange are still coming forward, and Bananas from Norfolk Island are now on the market. The greater part of the island shipment was small and green.

## FIJI BANANAS IN SYDNEY.

Net Return 5/7 a Case.

Mr. William Reid, who handled the Aorangi and Monterey consignments of Bananas in Sydney from Fiji, declared that although the Ottawa Agreement provided for the duty on Fijian Bananas being reduced from 8/4 to 2/6 per cental, the reduction had been completely nullified by the imposition of taxation charges which were never contemplated. The diversion of shipments to New Zealand would mean a serious loss of trade between Australia and Fiji, but would be of great benefit to the Dominion. The net total proceeds of £515/8/7 for 1,719 packages averaged only approximately 6/- a case. From this 6/-, provision has also to be made for State and Federal income tax and unemployment relief tax, which reduces the net return to the grower to approximately 5/7 a case.

Mr. Reid said the consignment by the Aorangi totalled 621 cases and 45 bunches. Gross sales amounted to £609/5/-, but the following deductions were made:—Duty £70/2/5, primeage £89/8/1, sales tax £53/0/10, quarantine £12, wharf charges £23/3/3, other charges £226; total charges, £423/15/1, making the net proceeds £185/9/11.

The Monterey's consignment totalled 1,010 cases and 13 bunches. Gross sales were £881/0/6, but the total charges amounted to £551/11/10, leaving net return of £329/18/8.—“The Queensland Producer.”

The firm of Geo. Monro Ltd. is an important fruit-distributing organisation, its headquarters being at Covent Garden Market, London, and Smithfield Market, Manchester. Other branches are at Birmingham, Glasgow, Worthing, Spalding and Hull. The directors are:—Major Edwin G. Monro, O.B.E. (Chairman), Geo. Monro, C.B.E., Bert J. Monro, Capt. J. Stuart Monro, Alex. J. Monro, and C. Cole.

## SPUR PRUNING OF PEAR TREES.

### Results in Better Setting and Quality of Fruit.

Attention was drawn last pruning season by the senior departmental fruit instructor located in the Goulburn district to the fact that fairly strong-growing Williams and Packham's Triumph Pear trees had carried satisfactory crops of fruit that season, although thrips had been present in the blossom in large numbers, whilst adjacent trees, the growth of which was weak or nil, failed to set any fruit. Similar instances of the advantages of moderate wood-growth have again been noticed this season, states the same writer in the current “N.S.W. Agricultural Gazette,” whilst the benefits derived from spur pruning for Pear trees—where necessary—have been very noticeable, and all varieties of Pears so treated, as well as some kinds of Apples, showed improvement in the setting and quality of the fruit.

At Parkesbourne, in the orchard of Mr. W. Grunsell, a Marie Louise Pear tree which had not produced a half-case of Pears per annum for the last five or six years, was heavily spur-pruned last winter, and produced a crop of from 5 to 6 bushels of Pears this season. Trees of other varieties in Mr. Grunsell's orchard gave similar results. In another orchard in the district three limbs of an old Winter Nelis Pear tree were spur-pruned, fully 75 per cent. of the blossom buds being cut out. These three limbs, it is stated, are carrying a heavy crop of Pears, whilst the blossoms on the rest of the tree failed to set. In the illustration accompanying the article one of the three limbs which were spur-pruned is shown bent down by the weight of fruit. The unpruned portion of the tree, on the other hand, failed to set any fruit.

Spur-pruning experiments on weak-growing Apple trees on which it was considered the blossom buds were too numerous also gave very favorable results. In this case, explains the writer, the object was not to help the tree to set more fruit, but by reducing the crop to improve the quality of the fruit produced, and also to improve the health of the tree, the profuse blossoming of some trees having a weakening effect. It was also expected that this treatment would increase the likelihood of a crop of fruit the following year, and judging by present appearances it seems likely to have this effect.

## N.S.W. FRUITGROWERS' CONFERENCES.

During May, district conferences of the N.S.W. Fruit-growers' Federation were held at Windsor, Singleton, and Gosford. These were well attended. In some districts growers favor the abolition of the flat rate of 6d. per case for agents' commission, and the retention of the 7½ per cent. as a maximum. In other sections it was decided that this subject be further reviewed in the light of the agents' expenses—credit sales, receiving and delivery, stamps, telegrams and stationery, and general overheads.

At Glenorie a resolution was carried by a narrow margin, recommending the Federation to endorse a limited number of fruit and produce agents to act as authorised agents of the Federation and to take all possible steps to employ only the authorised agents.

District Conferences of the Fruitgrowers' Federation of New South Wales were held during May. The annual Conference will be held at Sydney on June 28, 29 and 30. The agenda paper contains many items of great importance to the fruit industry.

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**THE NATIONAL MARK.**

Successful Standardisation and Advertising in England.

The National Mark Scheme, which was inaugurated in England some six years ago for the marketing of produce under defined standards of packing and grading, has proved successful. In the first year, provision was made for only Apples and Pears. Subsequently there were added:—Tomatoes, Cucumbers, Broccoli, Strawberries, Cherries, canned fruit, cider, Plums, bottled fruit, Cabbage, Lettuce, eggs, etc. Producers generally in England are very appreciative of the benefits which have followed the development of the National Mark scheme.

**NEW SOUTH WALES.**

**Passion Fruit (Winter Crop).**—Dry conditions and cold weather have retarded growth in the Hills district, states the Department of Agriculture in its April report. Prospects are poor. There is a good setting in the Lismore district. A fair crop is in sight in the Kurrajong district.

**Bananas.**—Colder conditions had the effect of retarding development of the fruit and growth of plants in some areas. 8,834 cases were consigned from Lismore during April. May and June shipments are likely to be light, but should improve during July.

All varieties of citrus trees may be obtained from Mr. A. T. Eyles, Fairmount Nursery, Rydalmere, N.S.W. Attention is directed to his advertisement in this issue.

## CONFERENCE OF AGRICULTURAL MINISTERS.

A conference of Ministers of Agriculture, attended also by senior departmental officers, was held at Sydney during May. It was decided to approach the Federal Government requesting legislation to enable the States to set up commodity pools for the marketing of primary products. Mr. Allan (Vic.) said that the dried fruit legislation in Victoria had benefited the growers. He would like to see boards set up for all products in each State.

Conference adopted a recommendation from the Fruit Sub-committee in favor of using the terms "extra fancy," "fancy" and "C" grade, in place of the present designations "special," "standard," and "plain." Tasmanian delegates voted in opposition.

The Fruit Sub-committee was also of the opinion that separate grade standards should be set up for Apples and Pears and recommended that such should conform to those adopted by competitors.

The variation in the gazetted standards for citrus maturity in the several States was discussed, and it was resolved to further investigate this matter. Regarding Lemons, it was decided that the States interested should pursue a vigorous educational campaign for the production of high-class summer Lemons to capture the summer trade.

With a view to minimising the bruising of Apples and Pears for export it was decided to recommend that corrugated strawboard or other suitable material be made compulsory.

A standardised pack for export Grapes being deemed essential, it was recommended that the Department of Commerce convene a conference of Grape growers, packers, shippers and departmental officers at Sydney in November, in conjunction with the meeting of the Apple and Pear Export Council.

The adoption of grade standards for fruit tree stocks was deemed to be highly desirable, and State Departments of Agriculture were recommended to investigate the subject with a view to the adoption of such standards. Tasmania submitted the question of the suitability of the East Malling types of Apple stocks and the formulation of plans for interstate experimentation. It was considered that because of diversified growth a unified plan was not possible, and it was suggested that the results of the work now in progress be communicated to interested workers.

The value of research work was recognised, and in view of the present financial position it was decided to ask the Federal Government to subsidise State departments to enable research work to be carried out.

It was decided that the next conference of Ministers of Agriculture be held at Hobart late in February, 1934.

**W.A. Grapes Exported.**—Western Australia has exported 39,979 cases of Grapes overseas this season.

## FRUIT BUYERS

LEMONS, ORANGES, GRAPEFRUIT,  
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## FRUIT PACKING INSTRUCTION.

Appreciation has been expressed both in South Australia and Tasmania for the services of Mr. W. L. Gregory, of the Gerrard Wire Tying Coy. In co-operation with the South Australian Fruit Marketing Association and the S.A. Department of Agriculture, Mr. Gregory recently spent seven weeks in South Australia in the training of fruit packers, both in Adelaide and in the country districts. During a fortnight's constant instruction in Adelaide, the attendance was over 15 per day.

In Tasmania, Mr. Gregory, in co-operation with exporters and growers, visited the principal fruit-packing districts, where he addressed meetings and gave fruit-packing instruction over a period of seven weeks. On all occasions Mr. Gregory urged that no "plain" grade Apples be exported. He also advocated that fruit-carrying ships should have smaller chambers,—about 14,000 cases would be ideal.

## EXPORTS FROM NEW ZEALAND.

1,423,000 Cases of Apples and Pears.

The export season for fruit in New Zealand is drawing to a close. It was an early season, perhaps the earliest on record, and large quantities have been shipped overseas. Totals for the different months were:—February, 69,000 cases; March, 479,000; April, 564,000, and it is estimated that during May a further 310,000 cases will be shipped.

Old gentleman (to new gardener): "You know, Wilkins, I have a few idiosyncrasies."

Gardener: "That's all right, sir; I'll be careful not to prune them too hard."

**Citrus Gowers!**

ALL VARIETIES CITRUS at  
70/- per 100.

CO-OP. BUD SELECTION TREES,  
£4/10/- per 100.

The Best Rooted and Grown Trees in N.S.W.  
Your Inspection Cordially Invited.

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**"Fruit World Annual"**

Comprehensive review of  
Australian and New Zealand  
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Prompt Advice and Payment.

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"WE STRIVE TO PLEASE"

**Victoria.**

Melbourne (31/5/33).—Prices quoted yesterday by the Wholesale Fruit Merchants' Association were:—Apples, per case: Eating, 2/- to 4/-; cooking, 1/6 to 2/6. Bananas: Q'dl'd., double case, green, 8's and 9's, 22/- to 23/-; 7's, 20/- to 21/-; 6's, 15/- to 19/-; rust-affected fruit lower. Grapes: Waltham Cross, 6/- to 8/-, few special higher; Ohanez, 5/- to 7/-; Purple Cornichon, 3/- to 4/-; Doradillo, 2/- to 3/- case. Lemons, case, 6/- to 8/-, Mandarins: N.S.W., 5/- to 8/-; Vic., 7/- to 12/-. Navel Oranges: N.S.W., 5/- to 7/-; Vic. and S. Aust., 7/- to 12/-, few special higher; common Oranges, to 5/-; Joffas, 6/- to 8/-. Grapefruit, 7/- to 8/-; only exceptional lines higher. Custard Apples, 4/- to 5/-. Passion Fruit, 5/- to 9/- case, special higher. Pineapples, double case, 9/- to 16/-. Pears, best to 6/-, inferior difficult to quit. Tomatoes, bulk, 3/- to 5/-; special to 6/-. Papaws, 10/- to 18/- double case.

The Melbourne Market Manager of the Federal Citrus Council of Australia reports that sales yesterday were as follow:—Navel Oranges, average Vic. and N.S.W. standard, 126 up, 6/-; a few 7/-; green, part colored or faulty, lower; selected Vic. and S.A. standards, to 9/- and 10/-, best counts; a few specially selected higher. Mandarins: Imperials, and Thornys, 180-248, to 18/-; larger and smaller, 2/- to 3/- lower; Fewtrells and well-colored Satsumas, to 11/-, best counts; green varieties, 6/- to 8/-. Common Oranges, N.S.W., white Silettas, to 5/-. Grapefruit, selected standards, to 10/-, best counts; 112 up, 6/- to 7/-; average Vic. standard grade, slow to 7/-, best counts. Lemons: Best Mildura, 180-248, 8/-; Adelaide, 7/-; a few selected higher.

**Grapefruit in Victoria.**—According to Mr. G. E. Kitchin-Kerr, Market Manager of the Federal Citrus Council, on May 15, the Grapefruit season has begun and fruit of good quality was being received from Mildura and Curnwaa. The Mildura fruit was smaller than usual, and there was an average of from 75 to 83 in a case. Prices varied from 12/- to 16/- per case, according to size.

Orchardists will find Sincos (Bordeaux Paste) helpful for fighting all fungus diseases. "Sincos" will not burn or russet, and supplies may now be ordered from the Bordeaux Chemical Co., 4 Glenbrook-avenue, East Malvern, whose advertisement appears in this issue.

**London (11/4/33).**—Mr. J. O. Sims, Borough Market, London, reported prices for 1,500 cases Victorian Apples ex Ballarat:—Jon. (small) 10/9, 11/8, large 9/-, 10/3; Alf. and Reinette, 8/- to 8/9; Shoreland and Cleo, 9/9; Dunns (small) 9/2, 9/9, large 7/6.

**FRUITERER KILLED.**

Norman Leslie Jacobs, 26 years, fruiterer, of Glenhuntly-road, Elsternwick (Vic.), died in a private hospital on May 8 as a result of injuries received in a collision between a fruiterer's truck in which he was a passenger and a motor-car.

The dead man's brother, John Edwin Jacobs, 31 years, the owner of the truck, was treated at home for abrasions and injury to his back.

---

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**Fruit and Vegetable Salesmen  
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**28 New Wholesale Fruit Market,  
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**Highest Market Rates Assured - Prompt Settlements**

Fruit Exported to all countries. Supplies of wood wool, cases, nails, wire and other packing equipment always on hand.

**Mildura and Merbein.**—Up to May 20 the total consignments of fresh Grapes despatched from Merbein railway station amounted to 24,455 cases against 33,235 cases despatched last year for the same period. For the week ended May 20, 202 tons, aggregating 7,312 boxes of new season's dried fruit, had also been sent from the same station, bringing the total consignments for the year up to 160,940 boxes, each of 56 lb., a total of 4,407 tons.

Deliveries from the packing sheds at Mildura are well in advance for consignments forwarded for the corresponding period last year. Respective deliveries to date are:—Export 72,337 boxes, or 2,153 tons, and Commonwealth 38,006 boxes, or 1,087 tons, compared with 60,214 boxes, or 1,640 tons, and 63,009 boxes or 1,752 tons, by the same date last season.

**Pollination Experiments.**—Mr. A. G. Strickland, M.Agr.Sc., Horticultural Research Officer, Victorian Department of Agriculture, gave a valued address on the "Pollination of Fruits" at the East Burwood Fruitgrowers' Association during May. He stated bees were an essential adjunct in every orchard.

Thousands in Use  
It earns its Famous LOW PRICE in a Few Days  
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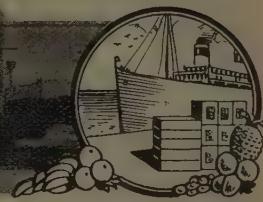
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**38 Wholesale Fruit Market, Melbourne  
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## CANNED FRUITS INDUSTRY.

Complimentary Dinner to Mr. A. W. Fairley on the Eve of His Trip Abroad.

## Importance of the Export Trade.

Mr. A. W. Fairley, J.P., Chairman of Directors of the Shepparton Fruit Preserving Coy., was tendered a complimentary dinner during May, at Shepparton, on the occasion of his departure for Great Britain and Canada. The good work done by Mr. Fairley was expressed in the speeches, and the wishes for a happy and profitable holiday were unanimous. Among those present were the Hon. R. Kilpatrick, M.L.C., Cr. J. H. Wilkinson (Shire President), Messrs. J. G. B. McDonald (Irrigators' Association), J. P. McLennan (Chamber of Commerce), W. Young, and H. J. Williams (Ardmona Cannery), T. H. Ray, L. J. Michel, J. F. Fairley, Neal Hanlon, H. B. Lincoln (Water Commission), T. H. Peart, and others. The secretarial duties were carried out by Messrs. N. W. Fairless and F. J. Pick. Apologies were received from several Members of Parliament and others.

Mr. J. G. B. McDonald presided: in proposing the toast of the guest, he spoke appreciatively of Mr. Fairley's work, personality and honesty of purpose. His work on the Export Control Board was invaluable.

Mr. T. H. Ray, for the directors of the S.P.C., said that his colleagues felt it essential that the chairman should go abroad at this time, not only in the interests of the S.P.C., but of the industry generally.

Mr. Neal Hanlon, on behalf of the Irrigators' Association, said that in Mr. Fairley they had one of the best stalwarts of the industry. The S.P.C. was in a very sound position under Mr. Fairley's wise guidance.

Mr. Michel congratulated Mr. Fairley on his insistence on a high quality pack: 82 or 84 returned soldiers were producing 40 per cent. of the cannery's fruit.

Mr. Wm. Young, on behalf of the Northern Victoria Fruitgrowers' Association, said that all the growers in the Goulburn Valley were delighted Mr. Fairley was going to the Old Country in view of his wide experience and bigness of outlook. The problem of to-day was that of markets. They had the men and the land to grow the finest fruit in the world, but they were up against a big problem in the selling of their produce. Mr. Williams conveyed the best wishes from the Ardmona and Kyabram companies for his trip abroad.

Mr. H. B. Lincoln conveyed the good wishes of Mr. Horsfield, Chairman of the Water Commission.

In reply, Mr. Fairley thanked those responsible for their good wishes. He was going home to represent the S.P.C., and also the Export Control Board. The Board had a great influence on the industry. Since the Board came in 1926, the export of fruit was over 3,700,000 cases and the industry had gained at least 3d. a dozen, which meant over £90,000 to the industry. The Board was financed by a levy of 1d. per dozen on exports, or something like 1 per cent. on the f.o.b. value. It only cost a few hundreds to run the Board, and over £2,000 was given annually to advertise the sale of canned fruits in England, and last year £1,500 was given annually to advertise in Canada. The Board had been instrumental for preferences in the British market. They were going to fight strongly for a flat rate of duty, and that matter would be taken up with Mr. Bruce in London. Preferences had been secured in Ceylon, British Malaya and Hong Kong. The production of the industry for the five years before 1928 was 1,142,000 cases, and in the five years it had risen to 1,377,000 cases, an increase of nearly

20 per cent. This year the production was likely to be 1,850,000 cases. The industry seemed to have been the hardest hit by the depression. Even in Australia, consumption had fallen from something like a million cases to about 400,000. They could not hope for a market in Canada as there was likely to be a carry over of about 71,000 cases this year. The N.Z. market had dwindled from 85,000 cases to about 25,000 cases. The only market left was Great Britain. The annual import of canned Apricots and Peaches was in the region of 3½ million cases, and last year Australia's share was 564,000 cases, which was a record, and practically the whole of that export was sold before it left these shores. Through the Ottawa Agreements, the British Empire had awakened to the fact that we must trade between ourselves, and he was looking for a great increase in that market: he hoped 1,200,000 cases of Australian canned fruit would be sold in Britain by December.

Mr. Fairley added that the industry had certain props under it to-day. There was the 25 per cent. exchange and the sugar concession, while the ratio of the dollar was still about 3.96 to the £1. If it went to par one prop would be struck away and prices in England might come back. He felt that if that did happen, they could still make good there at payable prices.

## TRADE IN CANNED PINEAPPLES.

The Department of Commerce recently announced that marked improvement had been made in the shipment of Queensland canned Pineapples this season, as compared with last year's exports. From July 1, 1932, to April 30, 1933, 146,517 dozen of 16 oz., 20 oz. and 30 oz. canned Pineapples had been shipped overseas, compared with 128,398 dozen last year, representing an increase of 18,119 dozen. The United Kingdom was the principal customer, with 86,136 dozen, followed by Canada with 69,714 dozen. In addition to those shipments, 1,500 dozen of 6½ lb. canned Pineapples had been shipped to Canada this season. The value of canned Pineapple exports from Queensland increased from £20,088 in 1930-31 to £72,334 in 1931-32.

## EXPORTS OF CANNED FRUITS, 1933.

The total exports of canned fruits from Australia from January 1 to April 30 were 256,264 doz. 30 oz. tins and 41,556 doz. 16 oz. tins. These comprised Apricots 62,055 doz. 30 oz. tins, 5,903 doz. 16 oz.; Peaches, 117,233 doz. 30 oz. tins and 19,803 doz. 16 oz.; and Pears, 76,976 doz. 30 oz., and 15,850 doz. 16 oz.

The statement, which is to hand from the Canned Fruits Control Board, shows that of these quantities the United Kingdom received 223,699 doz. 30 oz. tins and 38,924 doz. 16 oz. tins; New Zealand received 18,344 doz. 30 oz. tins, 140 doz. 16 oz. tins, and the East 12,434 doz. 30 oz. tins and 2,006 doz. 16 oz. tins.

## CANNED PEACH JUICE.

The Fruit Products Laboratory of the University for the California Canning Peach Growers are this year canning a new Peach product—canned Peach juice with about one-fourth strained pulp (states the "Pacific Rural Press," U.S.A.) It is anticipated this will be used for flavoring beverages and also in the using of Peach ice. It is rich in vitamin A, and can compete with Tomato juice in vitamin C, and requires no sweetening. Midsummers, Tuscan and Phillips varieties will be used for this purpose.

## SPECIAL NOTICE TO FRUITGROWERS

All Members  
under  
Fidelity Bond

In response to numerous requests from growers for information as to who are members of the WHOLESALE FRUIT MERCHANTS' ASSOCIATION OF VICTORIA, the following list is given. All are members of the above Association, and are registered firms carrying on business in the

## Wholesale Fruit Market, Melbourne

Stand numbers are as indicated in parentheses.

H. M. WADE & CO. (21).  
T. STOTT & SONS (26).  
H. L. E. LOVETT & CO. (23).  
A. E. PITTS (14).  
J. DAVIS PTY. LTD. (8).  
W. S. TONG (31).  
SILK BROS. PTY. LTD. (24-25).  
J. G. MUMFORD (35).  
GOLDEN VALLEY FRUIT CO. PTY. LTD.  
(15).  
W. SWEENEY PTY. LTD. (33).

GROWERS PROTECT YOURSELVES by consigning to members of the WHOLESALE FRUIT MERCHANTS' ASSOCIATION OF VICTORIA.

Correspondence is invited by the Association.

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P. A. PATRIKEOS (36).  
R. RENOFL (22).  
G. WOOLF & SONS (29-30).  
F. CAVE & CO. PTY. LTD. (9).  
R. CORNISH & SONS (5).  
J. HYMAN & SON (51).

J. D. FRASER, Secretary, 422-428 Collins St., Melbourne

### CANNED FRUITS PROCESSED THIS SEASON.

#### Details of Canned Peaches and Apricots.

**A** COMPARATIVE STATEMENT to hand from the Canned Fruits Control Board shows total quantities of canned Apricots processed in Australia during the past four seasons (in the equivalent of doz. 30 oz. tins) as follows:-

1930, 554,507; 1931, 183,076; 1932, 364,141; 1933, 447,238.

Of the 1933 pack of canned Apricots, 411,171 doz. were in 30 oz. tins and 46,560 doz. in 16 oz. tins. Of the export pack, 268,360 doz. 30 oz. tins were of standard grade, N.Z. pack 44,632, and domestic pack 84,755.

With regard to Peaches, the figures (in equivalent of doz. 30 oz. tins) were:-

	Halves.	Sliced.
1930 . . . . .	1,419,952	807,579
1931 . . . . .	857,767	491,824
1932 . . . . .	525,665	538,408
1933 . . . . .	1,817,639	749,139

Peaches (Halves).—Of the total processed in 1933, 1,720,574 doz. were in 30 oz. tins and 169,891 doz. in 16 oz. tins. Of the export pack, 942,613 doz. 30 oz. tins were of standard grade, N.Z. pack 113,046 of standard, and domestic pack 333,365.

(Sliced).—Of the total processed, 641,007 doz. were in 30 oz. tins, and 187,652 doz. in 16 oz. tins. Of the export pack, 351,020 doz. 30 oz. tins were of standard grade, N.Z. pack 83,789, and domestic pack 83,374.

The Vacuum Oil Co. Pty. Ltd. in their advertisement in this issue, advise growers to check re-infestation of aphids, red spider or bryobia, also scale and other insects, by spraying with Gargoyle Red Spraying Oil.

### VICTORIAN FRUIT MARKETING ASSOCIATION.

A meeting of the Executive of the Victorian Fruit Marketing Association was held at Melbourne on May 31. A progress report regarding the standardisation of Apple cases was presented by Messrs. Turnbull and Clark, Council for Scientific and Industrial Research. Mr. G. W. Brown, President, was appointed to attend the Australian Overseas Transport Association Conference in Sydney on June 19. Mr. J. B. Mills will be attending the Conference on behalf of the Fruit Exporters' Handling Committee. Mr. E. I. Lawford stated that over £1,000,000 had been paid in overseas freight on fruit from Australia this season.

In regard to the export levy, it was decided to submit to members an alteration to the constitution, by which all who contribute the levy could become members of the Association, and have a voice in its administration. Keen appreciation for the services of the Railways Department, also the Agricultural Department and Fruit Packing Instruction Staff was expressed.

Mr. J. M. Ward reported that the carefulness with which export fruit was now handled was highly commendable. Mr. Turnbull, C.S.I.R., stated more care was needed in handling fruit at overseas ports of discharge. Plans were considered for regular meetings of the Research Committee; the adoption of a National Mark Scheme to assist standardisation; an Apple Gift Scheme for Britain; improved co-ordination for export fruit shipments. The next meeting will be held on June 30, when plans will be discussed for holding a series of field days.

"Can you give me any idea as to when this house is going to be completed?" asked the future owner, impatiently. "I've arranged to be married as soon as it is finished."

"Don't worry about that, sir," replied the building foreman, giving him a knowing wink. "We'll hang the job out as long as we can."

**AUSTRALIAN DRIED FRUITS.****Sales in the United Kingdom.**

**I**N THE FIRST REPORT of sales of new season's Australian dried fruits, issued on May 8, 1933, the Commonwealth Export Board advise that shipments of the 1933 harvest to date amount to 25,555 tons, and shipments have been available for sale during the last three weeks.

Sales recorded with the agency of the Board in London show the disposal of 344 tons Sultanas at an average of £39/12/2 per ton, and 319 tons Currants at an average of £38/1/6 per ton.

The market is depressed by reason of the heavy shipments of American fruit which arrived in Great Britain prior to the imposition of the additional preferential duty and also by the presence of large stocks of Mediterranean fruit. These conditions account for the lower prices being realised for the balance of the 1932 season's harvest, sales of which since last report cover 544 tons Sultanas, averaging £36/6/- per ton, 569 tons Currants, averaging £28/17/- per ton, and 273 tons Lexias, averaging £25/9/6 per ton.

The quantity of 1932 season's fruit unsold at date is 3,473 tons Sultanas and 113 tons Lexias.

Sales in Canada to date from the new season's harvest as recorded with the Export Control Board amount to 670 tons, the demand being comparatively slow by reason of the carry-over of considerable stocks of Australian Sultanas of last season and by the uncertainty of exchange.

The quality of the 1933 harvest is uniformly good, and the offerings in Great Britain will be assisted by quality superior to that available during the past few seasons.

**DRIED TREE FRUITS CONTROL.**

A Bill to amend the Dried Fruits Control Act is now before the House of Representatives. The Bill provides for the growers of dried tree fruits, such as Peaches, to determine by ballot whether they wish to be brought under the provisions of the Act, which now applies only to vine fruits.

**Dehydration at Irymple.**—The operations of the new dehydrating plant established by the Milne-Gibson Australian Fruit Products Pty. Ltd., are proving successful. Mr. Gibson recently stated that he attributes the success to the high quality of the Mildura fruit; under a special process of dehydration the dried Raisins were of exceptional commercial quality.

You can get

**A Higher Price for Your Fruit**

by consigning it to:

**ORCHARD FRUIT SUPPLIES CO.  
Rockhampton, Queensland**

This Company owns five Retail Fruit Shops as well as running a substantial Wholesale and Country trade, and can get you the best possible prices for your fruit.

Prompt advices and returns.

Give us a trial now.

Address: Box 223, Rockhampton. Phone 1584. . .

**N.Z. EXPORTS TO ENGLAND.**

The Editor, "Fruit World."

Sir,—On page 134 of the April issue of the "Fruit World of Australasia," under the heading "Personal," we notice that in the second paragraph it is reported that Mr. A. L. Burke, managing director of J. & H. Goodwin Ltd., of Manchester, had acquired a contract, under which Messrs. Goodwins will market all the Apples and Pears exported from New Zealand to the United Kingdom. We take strong exception to this statement, as it is entirely without foundation.

A little while ago Messrs. Goodwins advertised in our trade papers to the effect that they were receiving all the New Zealand Apples and Pears this season. We immediately contradicted this and advertised in the same papers that we were receiving direct consignments of N.Z. Apples. We can substantiate this, and so can Messrs. Monros, who are also receiving direct consignments of N.Z. Apples.

We should therefore be glad if you would take steps to correct this statement in the next issue of the "Fruit World of Australasia."

Yours faithfully,

(Signed) T. J. Poupart Ltd.,  
Covent Garden Market, London, England (13/4/33).

**New Zealand.**

**Dunedin** (18/5/33).—Messrs. Reilly's Central Produce Mart report:—There is a keen demand for Lemons. During the week some very nice consignments of Pears came forward—supplies, if anything, being in excess of requirements. The quality of the Pears leaves nothing to be desired. There are some very fine W. Nelis, Vicars, and choice W. Coles, also some very fine Keiffer Hybrid, and a quantity of good cooking Pears. Unfortunately, there are quite large supplies of small, inferior W. Coles and Keiffer Hybrid, which retard in a great measure the sale of the better class Pears. Apples: Some very nice Apples are coming to hand, particularly Cleos, Jons., and Del., though some of the Del. coming on to the market are affected with watery core. For really choice fruit, prices range from 6/- to 8/- case, and for inferior small fruit anything from 2/- to 4/- has to be accepted to effect clearance. We are still receiving some very choice consignments of Grapes. These are coming forward from Christchurch, specially crated, and arriving in perfect condition—prices ranging from 2/3/-, and Oamaru Gros Colmars are realising the same money. Locals realised from 1/9 to 2/6. Cape Gooseberries have been in full supply; Passion Fruit short.

The first of the N.Z. Poormans, sometimes called Grapefruit, arrived in our market during the week, but there is a possibility of a shortage. Prices.—Half-cases: Apples, desserts, Otago Central Coxs wanted, 5/6; Pears, W. Nelis, 2/- to 3/-; W. Coles, 2/- to 3/-; Cape Gooseberries, 4/- to 5/6; Passions, N.Z., choice, 7/6. Bushel Cases: Apples, Otago Central Jons., 4/- to 6/6; Del., 4/- to 8/-; cookers, choice, 4/- to 5/-; others, 2/- to 3/-. Pears, W. Nelis, 6/- to 7/;- W. Coles, 5/- to 6/-; cookers, 4/; Lemons, N.Z., 27/6 to 30/-; Italian, 40/-. American Cases: Oranges, Vals., 45/-; Island, 17/6; Bananas, ripe, 22/6.

In the advertisement in this issue of Messrs. Minear, Munday & Miller Ltd., fruit brokers and commission salesmen, of Covent Garden, London, the name of their Victorian representative has been added. The Victorian representatives are Messrs. Gillin & Co. Pty. Ltd., 561 Bourke-street, Melbourne.

## DRAINAGE IN THE MILDURA DISTRICT.

Messrs. J. R. Lochhead and G. Hughes, representing the Mildura District Council of the United Country Party, recently waited upon the Minister of Water Supply at Red Cliffs, requesting that a comprehensive survey of drainage conditions be made in the Mildura, Red Cliffs and Merbein irrigation areas. They pointed out the need for an exhaustive enquiry into the efficiency of the present methods of disposal. Mr. Goudie, replying said that arrangements had been made for a questionnaire to be sent out to growers with a view of obtaining information as to how much drainage had been done and how effective it was. When the replies are received the Commission will have something to work on, and it would be possible to proceed with surveys in particular localities with a view to working out schemes.

At Kyabram during May, free moving pictures were shown of the Australian dried fruit industry. The screening of such films is part of the publicity and educational campaign being conducted by the industry. Pictures were shown of the various operations of the industry and included the Red Cliffs pumping station on the Murray. Mr. A. E. Hammet, of Red Cliffs, explained each picture. Films of nature studies and comedies were also shown on the screen. These picture shows are free and copies of a dried fruit cookery book were distributed amongst the audience.

**American Tomato Juice.**—According to the United States Department of Commerce, the Tomato juice pack in glass and tin for 1932 was approximately 4,450,000 cases.

## HOWARD ROTARY HOE.

Many fine reports have been received by Austral Auto Cultivators Ltd., Northmead, N.S.W., from users of the Howard Rotary Hoe. Farmers as well as orchardists find this hoe does its work in a most efficient manner and saves a lot of time and energy. Copies of these unsolicited testimonials can be seen at the Sydney office of the "Fruit World," 439 Kent-street.

## SUPPORT CO-OPERATION

By Consigning your  
FRUIT to the

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Agents for

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and all Orchard Requirements

Melbourne      Sydney  
Newcastle      Hobart  
Launceston      Devonport

## The Fruit World of Australasia.

## SOUTH AUSTRALIAN CELERY.

The S.A. Celery export season is now in full swing, reports Mr. C. W. McRostie. The Melbourne market has been somewhat depressed, owing to heavy supplies of the locally-grown article. Growing conditions have been ideal for the latter, with the result that the quantities marketed have been larger than usual.

The S.A. Fruitgrowers' Association recently commenced shipping Celery to Brisbane, with very satisfactory results. The whole of the S.A. Celery exports are now under the control of this Association.

## BANANA NOTES.

**Melbourne** (31/5/33).—Supplies from Queensland and N.S.W. have been light throughout the month of May. The N.S.W. consignments for the month totalled 9,133 cases compared with 11,683 cases which arrived the previous month. The general quality has been good, very little waste being evident.

Consignments of Tweed River (N.S.W.) Beans have commenced, and it is expected that increased supplies will be coming to hand from this district shortly.

## The BAVE - U POWER SPRAYER

has been remodelled; the pump has eccentrics enclosed running in oil, eccentric shaft fitted with ball races, valves detachable and interchangeable.

The water-cooled thermo-syphon engine has every refinement, including ball races in crank case bearings, etc.

Write for full particulars to the manufacturers.

## RUSSELL &amp; CO.

ENGINEERS - Box Hill, E.11, VICTORIA

## Cooksley &amp; Co.

(W. P. COOKSLEY)

Reliable Fruit Agents

Over 30 Years Experience

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All consignments for  
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realise highest prices  
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Fruitgrowers of Otago  
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Personal supervision of  
every consignment.

Cheques posted promptly.  
Drop us a Line or Cable:  
"Peachbloom," Dunedin.

## Queensland

Adverse Criticism of C.O.D.

Stanthorpe Growers Desire Freedom.

Reply by Mr. W. Ranger.

WITH THE OBJECT OF IMPROVING the Apple trade in Queensland, a levy was imposed at the rate of 3d. per case on all Queensland Apples sold within the State. The plan was that the Committee of Direction of Fruit Marketing should purchase surplus supplies that might be marketed daily, cool store the fruit until the end of the picking season, and sell it according to market requirements. This scheme seemed quite feasible and growers readily agreed to it, but it has not turned out quite as satisfactorily as was anticipated. Growers now state the buyers of the C.O.D. confined their attention to best quality Jonathans and Granny Smiths, for which they paid 6/- a case, but the small quantity did not appreciably affect the prices of what was left. The public also were prepared to pay the same price. The original idea was that any deficiency between the price realised and the price paid (6/-) should be paid out of the levy, but as the fruit will apparently realise the price paid, growers discount the value of the scheme. Meantime, they have had to pay the levies—which total about £2,500—3d. per case on about 155,000 cases of Stanthorpe Apples sold in Brisbane and 50,000 cases sold in the country.

### Protest Meeting at Stanthorpe.

At a largely attended meeting at Stanthorpe on May 11, Mr. J. B. Ferris presiding, dissatisfaction was expressed with the manner in which the C.O.D. had treated the Deciduous Section Group Committee. A resolution of no confidence in the management of the C.O.D. was carried; further, that a deputation comprising Messrs. J. B. Ferris, C. Warren and W. Hickmore wait on the Minister for Agriculture requesting an amendment of the Fruit Marketing Act to secure separate autonomy for the Granite Belt. Growers stated that the C.O.D. policy was moulded apart from the Deciduous Section Group Committee.

Reply by Mr. Ranger.

The Manager of the C.O.D. (Mr. W. Ranger) has issued a statement to the effect that the criticism from Stanthorpe was premature. Growers should await a full report before passing judgment. The levy of 1d. per case on Grapes was to pioneer export chiefly to New Zealand and Canada—principally to New Zealand, but this was prevented by the embargo. The levy was intact and could be returned to growers.

With regard to Apples, growers had agreed to the stabilisation fund to meet export losses and to assist local market stability. Export prices were awaited; the removal of several thousands of cases from the local market had maintained higher prices than would otherwise have been possible.

\* \* \* \* \*

Speaking at the Victorian Fruit Cool Stores Conference, Mr. Ranger said that Stanthorpe growers were apparent-

## THE Brisbane Fruit Markets

### ROBSONS LIMITED

(Wm. Robson, Managing Director)

Guarantee satisfaction to Clients. Send us a trial consignment.

FRUIT EXCHANGE, BRISBANE, Qld.

*Account Sales and Cheques sent promptly.*

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Highest Prices.

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FRUIT EXCHANGE, BRISBANE,  
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and Growers' Agent.*

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Established 1888.

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Your consignments will receive best attention from

### E. WINTERS

Growers' Agent

Fruit Exchange, Turbot Street, Brisbane

Interstate Representative:

A. S. KRCROUSE,  
261 Maroubra Bay Road,  
Maroubra, Sydney, N.S.W.

Phone: F J 1366

Brands
Tasmanian Shipping No. 23
All Others E.W. 86, Bris.

Reference :

National Bank of  
Australasia Ltd.,  
George Street, Brisbane,  
Queensland.

ly "thirsting for his gore," but he had no doubt that when the facts were placed before them all outstanding problems would be satisfactorily adjusted. The fund raised by the levy on Apples was unexpended and would be returned to contributors if they so desired.

### FROZEN PINEAPPLES?

Among the many fruits and fruit juices that have been subjected to quick freezing by the United States Department of Agriculture, Pineapples have uniformly yielded products that are superior to those preserved by heating. Samples held in storage more than a year, it is reported, have retained the characteristic Pineapple flavor and color to such an extent that many who have tasted them have noted little difference from the fresh fruit. The cooked and often rather sharp acid taste of canned Pineapple is absent, and the texture is firmer than that of the canned Pineapples. The frozen juice also has no cooked taste and does not deteriorate like the pasteurised juice, either in color or flavor.

### Queensland.

Brisbane (27/5/33).—Qld. Navel Oranges, best 6/- to 8/-, small 4/- to 6/-; Qld. Oranges, best 3/- to 5/-, small 2/6 to 3/-; Mandarins, Emperors 6/- to 10/-, Scarlets 7/- to 10/-, Fewtrels 6/- to 8/-; local Lemons, 2/6 to 4/-; Grapefruit, 3/6 to 4/-; Yarwun Papaws, 6/- to 8/- per Pineapple case; Gunalda Papaws, 2/6 to 4/- bush. case; local Papaws, 3/- to 4/- case; Pears, N.S.W. W.C., 9/- to 11/- case; Pineapples, smoothleaf, best 6/- to 9/-; Ripley's, 4/- to 6/- case; Passion Fruit, first grade 7/- to 9/-, second grade 3/- to 6/-; Southern Lemons, 13/- to 14/-; Qld. Apples, G. Smith 7/- to 9/-, D.M. 5/- to 6/-, Del. 4/- to 7/6 case, B. Davis 4/- to 4/6, W. Saps 5/- to 7/-, Demos. 5/- to 6/-, Tasma 6/-; Cust. Apples, 2/- to 3/5 case; Tas. Apples, N.Y.P. 6/- to 7/6 case, A.R.O. 5/2 to 6/-, Jons. 8/- to 9/-, F.C. 7/- to 8/-, S.P.M. 6/- to 7/6, H.B. 6/- to 7/6; Tas. Pears, W.C., best 9/- to 11/-, small 5/- to 8/- case, G.N. 5/- to 7/-, G.S. 5/- to 8/-, F.B. 7/- to 8/-, W.N. 6/- to 9/- case. A few Victorian Apples were on the market, and Jons. sold from 6/- to 9/- case, L.P. 5/- to 5/6, R.B. 7/- to 8/- case; S. Aust. Quinces, 6/- bush. case; Quinces, Stanthorpe, 5/-; Custard Apples, 2/6 to 3/6; Southern Grapes, white 5/- to 6/6 case, black 4/- to 5/- case; Benyenda Nnavels, 10/- to 12/- case; Glens, 13/- to 17/-; Emperors, 9/- to 10/- case, others 10/- to 12/-; Lemons, 16/- to 17/-; Joppa Oranges, 8/- to 9/-; Siletta, 9/-; Gayndah Lemons, 10/- to 11/- case.

Blyth's "Blue Bell" Quality Sprays have been made in Australia for over twenty years. These include Arsenate of Lead (paste or powder), Spray Spreader, Bordeaux, Lime Sulphur, White Oil, Nicotine Sulphate, Red Oil, etc. See advertisement on page 301.

### LIME IN THE SOIL.

**S**OILS REQUIRE LIME as well as other plant foods. Lime prevents sourness, liberates other properties from present fertilisers, and improves the mechanical condition of the soil. You should test your soil to see if it has the required quantity. Get some hydrochloric acid from the chemist (about 1 oz. will be ample), and dig up some soil from the part of the garden you require to test for lime content. Put about two handfuls of this soil into an old basin, and stir with water until the whole is of the consistency of thick cream. Now add the acid slowly and stir, and see what happens. If there is no fizzing and bubbling, then lime is certainly needed, but if bubbles rise to the surface, then the lime is unnecessary. The only thing that must not be done is to add lime and manure together, but allow three to four weeks between the application of each.

\* \* \* \* \*

The foregoing was submitted to Mr. A. G. Strickland, M.Ag.Sc., Horticultural Research Officer, Victorian Department of Agriculture, who states as follows:—

The method referred to is a test which is useful for ascertaining whether the soil contains free lime carbonate. The effervescence is the result of the release of carbon dioxide gas from the carbonate. As a general rule, the test would be useful in recognising soils which are well supplied with carbonate of lime, and therefore would not require dressings of agricultural lime.

In the case of a test where no effervescence occurred, deficiency of free lime would be indicated, but this would not always mean that the soil was seriously deficient in total lime.

In spite of this last reservation, I think that the test would be useful to home gardeners, but should be used more to ascertain when lime is not needed than to determine that lime is necessary.

The polychrome indicator test is the best method of finding out whether or not the soil requires lime.

### South Australia.

Adelaide (27/5/33).—Apples (eating), 4/- to 5/-, case; do. (cooking), 2/6 to 3/- case; Bananas, 22/- to 26/- crate; Grapes (dark), 8/- case; do. (white), 6/- case; Lemons, 4/- to 5/- case; Oranges (common), 7/- to 8/- case; do. (blood), 8/-; do. (Mandarin), 12/-; do. (Navel), 8/- to 10/-; do. (Poorman), 6/- case; Passion Fruit, 26/- case; Pears (eating), 4/- to 6/- case; do. (cooking), 2/6; Pineapples, 14/- case; Quinces, 3/- to 4/- case.

Be silent always, when you doubt your sense,  
And speak tho' sure, with seeming diffidence.

\* \* \* \* \*

Dare to be true. Nothing can need a lie;  
A fault which needs it most, grows two thereby.

Do not run any Financial Risk with your Fruit  
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Victorian Central Citrus Assn. Ltd.

Tasmania: State Fruit Advisory Board.  
New South Wales: N.S.W. Central Citrus Assn. Ltd.  
Batlow Packing House Co-op. Soc. Ltd.